

South Dakota Science and Technology Authority

**Annual Board Meeting
June 16, 2016**



630 East Summit Street
Lead, SD 57754

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Call to Order – Chairperson Casey Peterson

1A. Call Roll

Dr. Ani Aprahamian

Mr. Paul Christen

Mr. Dana Dykhouse

Ms. Pat Lebrun

Mr. Casey Peterson

Mr. Ron Wheeler

Dr. Robert Wilson

Dr. Heather Wilson

1B. Introduce Guests

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**South Dakota Science and Technology Authority
June 16, 2016 Board Meeting**

Agenda Item: 02

Approve Agenda – Chairperson Casey Peterson

Attached is the SDSTA Board agenda for the June 16, 2016 meeting.

Recommended Action:

Motion to approve agenda as presented.

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AGENDA
South Dakota Science and Technology Authority
630 East Summit Street, Lead, South Dakota
Annual Meeting of the Board of Directors
Thursday, June 16, 2016 at 8:00 AM (MT)
****Yates Education & Outreach Conference Room****

SDSTA Mission: *To advance compelling underground, multidisciplinary research in a safe work environment and to inspire and educate through science, technology and engineering.*

Noon Lunch at Visitor Center with the SD Chamber of Commerce & Industry Board of Directors

Title	Report	Recommendations
1. Call to Order A. Call Roll B. Introduce Guests	-- Chair Casey Peterson	<i>Informational</i>
2. Approve Agenda	-- Chair Casey Peterson	<i>Motion to approve agenda</i>
3. Conflict of Interest Disclosure	-- Mr. Tim Engel	<i>Informational</i>
4. Approve Minutes	-- Chair Casey Peterson	<i>Motion to approve March 17 and April 19 Minutes</i>
5. Audit Committee A. Appoint Members to Audit Committee B. Accept Audit Report FY Ended June 30, 2015	-- Chair Casey Peterson -- Ms. Pat Lebrun	<i>Annual appointment of committee members per Audit Charter</i> <i>Motion to accept Audit Report Fiscal Year Ended June 30, 2015 per discussion at March 17 board meeting</i>
6. Financial Report A. Financial Statements B. FY2017 Budget C. Internal Controls Update D. May, Adam, Gerdes & Thompson Hourly Rate Increase	-- Mr. Mike Headley -- Ms. Nancy Geary -- Ms. Nancy Geary -- Mr. Mike Headley -- Mr. Mike Headley	<i>Informational; reference board packet</i> <i>Motion to approve FY2017 budget as presented</i> <i>Informational</i> <i>Motion to approve hourly rate increase as presented</i>
7. Report from Executive Director A. SDSTA May Monthly Report B. Declaration of Surplus—Printers C. Davis Bahcall Introductions D. Facility Master Plan E. Updated Risk Transfer Protocols	-- Mr. Mike Headley -- Mr. Mike Headley -- Mr. Mike Headley -- Dr. Brianna Mount -- Mr. Mike Headley -- Mr. Tim Engel	<i>Informational; reference board packet</i> <i>Informational; reference board packet</i> <i>Informational</i> <i>Copy to be distributed to each board member</i> <i>Motion to approve amended Risk Transfer Protocols for Contractors and Project Sponsors as presented</i> <i>Motion to accept executive director's report</i>
8. Contracts A. USD Foundation Loan Agreement for additional Xenon Purchase B. Ellison Hill Option	-- Mr. Mike Headley -- Vice Chairperson Ron Wheeler -- Mr. Tim Engel	<i>Motion to approve the loan from the University of South Dakota Foundation, authorize the Chair in consultation with Legal Counsel to sign the loan agreement and promissory note, and to authorize the Executive Director to procure up to 500,000 liters of xenon once the loan documents are executed.</i> <i>Motion to authorize the Chair, in consultation with the Executive Director and Legal Counsel, to exercise the option for the purchase of the Ellison Hill property at such time and upon such terms as the Chair deems appropriate</i>

Please do not place or accept cell phone calls during this meeting. A copy of this agenda has been posted in a manner visible to the public at the entrance to the South Dakota Science and Technology Authority office located at 630 East Summit Street, Lead, South Dakota at least 24 hours prior to this meeting. Telephone: (605) 722-8650.

AGENDA
South Dakota Science and Technology Authority
630 East Summit Street, Lead, South Dakota
Annual Meeting of the Board of Directors
Thursday, June 16, 2016 at 8:00 AM (MT)
****Yates Education & Outreach Conference Room****

Noon Lunch at Visitor Center with the SD Chamber of Commerce & Industry Board of Directors

Title	Report	Recommendations
C. External Funding Contracts	-- Mr. Mike Headley	<i>Informational</i>
9. Executive Session	-- Chair Casey Peterson	<i>Motion to enter executive session to discuss personnel matters and to consult with legal counsel concerning contractual matters</i>
10. Report from Executive Session	-- Chair Casey Peterson	<i>Motion to accept executive session report</i>
11. SDSTA Policies and Procedures	-- Mr. Mike Headley	...
A. Annual Review of P&P		
B. Sign Annual Statements affirming compliance with Financial Conflict of Interest Policy 3:27		<i>Each board member is to sign a copy of the financial conflict of interest statement</i>
C. Briefing of New Conflict of Interest Law	-- Mr. Tim Engel	<i>Informational</i>
12. Annual report of FRA/SDSTA Conflict of Interest Mitigation Plan	-- Mr. Tim Engel	<i>Informational</i>
13. Report from Nominating Committee	-- Mr. Dana Dykhous	<i>Reference nominating committee minutes in board packet</i>
14. Election of Officers	-- Chair Casey Peterson	<i>Motion to accept the report from the nominating committee and to elect the slate of officers as discussed (follow procedure adopted August 2008)</i>
15. Confirm date and time of next meeting	-- Chair Casey Peterson	<i>Thursday, September 22, 2016 at 9:00am (MT)</i>
16. Board Comments		
17. Adjourn	-- Chair Casey Peterson	<i>Motion to adjourn</i>

SDSTA Board Member Terms of Service, Committees and Schedule

	Board Members and Terms of Service		
	Board Members	Appointed	Term Expires
1.	Dr. Ani Aprahamian	Re-appointed December 9, 2015	December 9, 2021
2.	Mr. Paul Christen	January 31, 2011	August 8, 2016
3.	Mr. Dana Dykhous, Vice-chair	Re-appointed August 1, 2014	August 14, 2020
4.	Ms. Patricia Lebrun, Secretary-Treasurer	Re-appointed August 16, 2010	August 8, 2016
5.	Mr. Casey Peterson, Chair	Re-appointed August 25, 2015	August 8, 2021
6.	Mr. Ron Wheeler, Vice-chair	Re-appointed April 10, 2014	April 9, 2020
7.	Dr. Robert Wilson	August 24, 2015	August 8, 2021
8.	Dr. Heather Wilson, ex-officio member	SDSM&T President appointed July 1, 2014	
	Committees and Members (2015)		
	Audit Committee Members:	Nominating Committee Members:	
	➤ Pat Lebrun-Chair	➤ Ani Aprahamian	
	➤ Paul Christen	➤ Dana Dykhous	

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**South Dakota Science and Technology Authority
June 16, 2016 Board Meeting**

Agenda Item: 03

Conflict of Interest Disclosure—Mr. Tim Engel

Recommended Action:
Informational.

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**South Dakota Science and Technology Authority
June 16, 2016 Board Meeting**

Agenda Item: 04

Approve Minutes – Chairperson Casey Peterson

Attached are the SDSTA Board Minutes for the following meetings:

- March 17, 2016
- April 19, 2016 (telephonic)

Recommended Action:

Motion to approve the Minutes of the March 17 and April 19, 2016 meetings as presented.

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South Dakota Science and Technology Authority Board of Directors
Meeting Minutes
Thursday, March 17, 2016
Lead, South Dakota

The Board of Directors of the South Dakota Science and Technology Authority (SDSTA) convened at 9:00 AM Mountain Time (MT) on Thursday, March 17, 2016 in the 2nd Floor Vault Conference Room at the South Dakota Science and Technology Authority, 630 East Summit Street, Lead, South Dakota.

MEMBERS OF THE BOARD IN ATTENDANCE

Dr. Ani Aprahamian (by phone)
Secretary/Treasurer Patricia Lebrun (by phone)
Chairperson Casey Peterson
Vice Chairperson Ron Wheeler
Dr. Heather Wilson (by phone)
Dr. Robert Wilson (by phone)

MEMBERS OF THE BOARD NOT IN ATTENDANCE

Mr. Paul Christen
Vice Chairperson Dana Dykhouse

SDSTA STAFF

Ms. Michelle Andresen, ESH Administrative Assistant
Ms. Billi Bierle, Sanford Lab Homestake Visitor Center Director
Mr. Tim Engel, Legal Counsel
Ms. Nancy Geary, Chief Financial Officer
Mr. Mike Headley, Executive Director
Dr. Jaret Heise, Science Director
Ms. Sharon Hemmingson, Business Services and Contracts Manager
Dr. Markus Horn, Research Scientist
Ms. Mandy Knight, Administrative Services Manager
Mr. KC Russell, Cultural Diversity Coordinator
Mr. Noel A. Schroeder, Environment, Safety and Health (ESH) Director
Ms. Constance Walter, Communications Director
Mr. Walter Weinig, Laboratory Director

ALSO PRESENT DURING ALL OR PART OF THE MEETING

Dr. June Apaza, Education and Outreach Director (BHSU)
Ms. Kay Jorgensen, Cultural Advisory Committee Member

ITEM 1. CALL TO ORDER

Chairperson Peterson called the meeting to order at 9:00 AM (MT). Roll call was held. Chairperson Peterson and Vice Chairperson Wheeler were present in person and Dr. Robert Wilson joined the meeting by telephone. Mr. Paul Christen and Vice Chairperson Dana Dykhouse were absent. Chairperson Peterson asked guests to introduce themselves.

At 9:02 AM, Dr. Heather Wilson joined the meeting by telephone. At 9:03 AM, Ms. Pat Lebrun joined the meeting by telephone and a quorum was established.

ITEM 2. APPROVE AGENDA

Chairperson Peterson asked for a motion to approve the agenda. Mr. Mike Headley asked if agenda items under the Executive Director's Report could be moved out of order, if needed, and Chairperson Peterson said yes.

Motion by Mr. Wheeler and second by Ms. Lebrun to approve the agenda. By roll call vote, the motion passed unanimously.

ITEM 3. APPROVE MINUTES

Chairperson Peterson asked for comments, changes or corrections to the Minutes of the December 10 and December 22, 2015 meetings. Hearing none, a motion to approve was requested.

Motion by Mr. Wheeler and second by Dr. Robert Wilson to approve the Minutes of the December 10 and December 22, 2015 meetings as presented. By roll call vote, the motion passed unanimously.

ITEM 4. AUDIT COMMITTEE REPORT

Audit Committee Chairperson Ms. Patricia Lebrun reported the Audit Report for Fiscal Year Ended June 30, 2015 was finalized and is in the board packet for discussion. She said the letter from the Auditor's Office to the Governor in regard to compliance stated a clean audit, no non-compliance and no discrepancies. Ms. Lebrun pointed out Item h in the report, under the Federal Awards, "The SDSTA as a component unit of the State of South Dakota did not qualify as a low-risk auditee." Dr. Robert Wilson asked for clarification of what a "low-risk auditee" meant. Chairperson Peterson advised the board that when any auditor takes an audit engagement they must determine a risk level, they analyze the auditee as an entity and also based on federal funding, federal programs per their testing and types of operations and contracts to give them what types of testing to perform as part of their audit process.

Chairperson Peterson requested the language should be corrected on page 5, last paragraph, Item 8: "Significant Commitments, Contracts and Subsequent Events" and wording modified from "private investors" to "non-profit". Vice Chairperson Wheeler assured the board there are no private partnerships and asked Chief Financial Officer Ms. Nancy Geary to follow up on the language with the Auditor and provide an update at the June board meeting.

Chairperson Peterson noted a second wording modification on the same page, third paragraph per the Property Donation Agreement should read "the" instead of "our."

Ms. Lebrun congratulated and thanked Ms. Geary and her staff for yet another audit with no deficiencies noted. Chairperson Peterson acknowledged the Audit Committee report and said a motion to approve the report will be necessary at the June board meeting.

Ms. Lebrun ended with stating the Audit Committee had a teleconference on the topic of internal controls as it relates to SDSTA. She said the committee has decided to take a "wait and see" approach and do what is expected after the Governor's State Board of Internal Control establishes guidelines for internal controls.

ITEM 5. FINANCIAL REPORT

Executive Director Mr. Mike Headley and Ms. Geary discussed the new water inflow pipe project and explained the underground water diversion plan. Ms. Geary said the project has been added to the CapEx list at an estimated cost of \$200,000.

Dr. Aprahamian joined the meeting by telephone at 9:20 AM.

The xenon purchase was discussed. Vice Chairperson Wheeler said bids were received in January at set prices and the option can be exercised within the next year to purchase additional liters at the locked in price.

ITEM 6. REPORT FROM THE EXECUTIVE DIRECTOR

Mr. Headley discussed the SDSTA February Monthly Report beginning with the current safety performance, then proceeded with the following: Status update of both underground campuses, Ross Shaft rehabilitation 70% complete, LZ designs and construction plans advancing for the Department of Energy (DOE) Critical Decision (CD)-2/3b Review scheduled in April at Lawrence Berkeley National Laboratory (LBNL) and the Long-Baseline Neutrino Experiment/Deep Underground Neutrino Laboratory (LBNF/DUNE) progress.

Mr. Headley also provided an overview of the Strategic Planning objectives and said it has been entered into the P6 plan and is being reviewed monthly. Mr. Headley discussed the two Declarations of Surplus: the 125HP Roots blowers and the Yates Crusher equipment.

Mr. Headley discussed the revised Intergovernmental Agreement between the South Dakota Office of Risk Management and SDSTA. Mr. Engel said this was initially authorized for safety compliance purposes and it was time to update to exclude the property to be the leased property to DOE and update some other provisions.

Dr. Heather Wilson left the teleconference at 9:46 AM.

Mr. Headley discussed the First Amendment to the Memorandum of Understanding between the Homestake Visitor Center and SDSTA concerning the Creation and Operation of the Visitor Center and the related Instrument of Conveyance. Dr. Robert Wilson asked how the Visitor Center is shown on the balance sheet. Ms. Geary said this would be handled as a donation of approximately \$5 million, to occur before June 2016 and off the books by the end of the fiscal year.

Mr. Headley introduced SDSTA Laboratory Director Mr. Walter Weinig who gave a presentation on major operations activities. Mr. Weinig provided an update on the Ross Shaft Rehabilitation, Yates Top-Down Maintenance, water inflow mitigation, 4850L fire protection water system and current contracts. Mr. Weinig asked if there were any questions; there were none.

Mr. Headley then introduced SDSTA Science Director Dr. Jaret Heise who gave a presentation on Science Integration. Dr. Heise provided an update on the following: Davis Campus—Large Underground Xenon (LUX) and MAJORANA DEMONSTRATOR (MJD), Ross Campus—Black Hills State University Underground Campus (BHUC) and Compact Accelerator for Performing Astrophysical Research (CASPAR), and the newest experiment added to the Ross Campus, LUX-ZEPLIN (LZ) SOLO which relocated from the Soudan Mine in Minnesota.

Dr. Aprahamian left the teleconference at 10:13 AM.

Motion by Mr. Wheeler and second by Dr. Robert Wilson to re-authorize the executive director to sign the amended Intergovernmental Agreement between the South Dakota Office of Risk Management and SDSTA. By roll call vote, the motion passed unanimously.

Motion by Mr. Wheeler and second by Dr. Aprahamian to authorize the executive director to sign the First Amendment to the Memorandum of Understanding between the Homestake Visitor Center and SDSTA concerning the Creation and Operation of the Visitor Center and the chairperson to sign the Instrument of Conveyance. By roll call vote, the motion passed unanimously.

Motion by Dr. Robert Wilson and second by Mr. Wheeler to accept the executive director's report. By roll call vote, the motion passed unanimously.

ITEM 7. CONTRACTS

Mr. Headley introduced Business Services and Contracts Manager Ms. Sharon Hemmingson to discuss contracts that were not included in the original budget from last June. The first contract discussed was to repair a section of the Yates Administrative Building parking lot. The lowest bidder, RCS Construction, was selected.

The second contract discussed was to replace the Administrative Building and Foundry roofs. Ms. Hemmingson stated three bids were submitted and the lowest bidder, Ainsworth Benning Construction, was selected.

The third contract discussed was to refurbish Yates Hoist Motor Generator sets. The LBNL operations contract has carry forward money which will be used for infrastructure upgrades to rebuild the motor generator sets. The total will be \$1.42 Million from the DOE funding. The lowest bidder, JoyGlobal, was selected.

The final contract discussed was the LZ Surface Radon Control System. Mr. Headley said a portion of the \$2 Million future fund grant for facility upgrades from the SD Governor's Office of Economic Development (GOED) will be used for this.

Mr. Headley thanked Ms. Hemmingson for all her work with the contracts.

Motion by Mr. Wheeler and second by Ms. Lebrun to authorize the executive director to sign the final contract to repair the Yates Administrative Building parking lot as presented. By roll call vote, the motion passed unanimously.

Motion by Mr. Wheeler and second by Ms. Lebrun to authorize the executive director to sign the final contract to replace the Administrative Building and Foundry roofs as presented. By roll call vote, the motion passed unanimously.

Motion by Mr. Wheeler and second by Dr. Robert Wilson to authorize the executive director to sign the final contract to refurbish the Yates hoist motor generator sets as presented. By roll call vote, the motion passed unanimously.

Motion by Mr. Wheeler and second by Ms. Lebrun to authorize the executive director to sign the final contract for the LZ Surface Radon Control System as presented. By roll call vote, the motion passed unanimously.

Chairperson Peterson asked Vice Chairperson Wheeler to discuss the loan agreement for the additional xenon purchase. Vice Chairperson Wheeler said he submitted a proposal for the final purchase and met with the chairperson of the University Foundation as well as the chairperson of the Investment Committee for the Foundation. He said he is waiting to hear the outcome in the next couple of weeks.

ITEM 8. EXECUTIVE SESSION

Motion by Mr. Wheeler and second by Mr. Robert Wilson to enter into executive session to discuss personnel matters and to consult with legal counsel concerning contractual matters. By roll call vote, the motion passed unanimously.

The board recessed at 10:38 AM for Executive Session and reconvened at 11:30 AM.

ITEM 9. REPORT FROM EXECUTIVE SESSION

Chairperson Peterson reported that the board discussed personnel matters and consulted with legal counsel concerning contractual and legal matters. No action was taken.

Motion by Mr. Wheeler and second by Dr. Robert Wilson to approve the executive session report. By roll call vote, the motion passed unanimously.

ITEM 10. REVIEW OF SDSTA POLICIES

Mr. Headley briefly discussed the following policy recommendations and said they had been reviewed by Mr. Engel.

The following policies were recommended for approval:

- Manual Contents Page (*updated*)
- Policy 2:23 Identity Standards and Style Guide Policy (*new*)
- Policy 3:28 Delegation of Authority-Procurement (*updated; established upper limit on each level of authorization and clarified wording*)

The following procedures were presented for informational purposes only.

- Procedure 2:23A Identity Standards and Style Guide (*new*)
- Procedure 5.2A Code of Business Ethics and Conduct (*updated to include external hotline and third party website address*)

Ms. Lebrun inquired if the Sanford Lab logo is a registered trademark. Mr. Engel said the Sanford name is registered but the logos are not registered at this time as they are relatively new. SDSTA Communications Director Ms. Constance Walter mentioned it would be an expense of approximately \$3,000. Vice Chairperson Wheeler asked Ms. Walter to verify if DUSEL had registered it previously and to report the status to the board at the June meeting.

Motion by Mr. Wheeler and second by Ms. Lebrun to approve the new and updated policies as presented. By roll call vote, the motion passed unanimously.

ITEM 11. 2016 LEGISLATIVE UPDATE

Mr. Engel said that the state legislators are very supportive of Sanford Lab. He said during the Legislative Session, he monitored bills relating or potentially relating to SDSTA such as building codes, personnel matters, bidding processes, mineral interests, open meetings and conflicts of interest.

Those relating to the SDSTA were the international building and fire codes, international mechanic codes and plumbing codes. He said the mineral interest bill relates to the mineral rights which Homestake donated to SDSTA. We will analyze what needs to be done to preserve those interests for SDSTA. He said House Bill 1066 Open Meeting laws will now require 48-business hours meeting notice instead of 24-hour notice effective July 1, 2016.

Mr. Engel said Senate Bill 73 contains the definition of an official meeting as one at which official business is discussed. SB 73 also includes meetings undertaken by telephone conference, Skype, etc., as "official meetings." There is nothing new for the SDSTA. He said Senate Bill 90 allows persons to record the meetings openly as long as it is not disruptive.

In regard to House Bill 1214, Mr. Engel said a conflict of interest disclosure and approval process adopted last year only applied to state employees. House Bill 1214 extends those same procedures to members of the SDSTA and other authority boards. This new law is almost identical to the Sanford Lab's current policy so there is no significant change.

ITEM 12. SDSTA EMPLOYEES LEAVING TO WORK FOR SDSTA VENDORS

Mr. Engel advised the board that the conflicts of interest bills adopted in both 2015 and 2016 would not apply to persons leaving SDSTA employment to go to work for SDSTA vendors, but the 2016 legislation does apply to board members.

ITEM 13. SELECT NOMINATING COMMITTEE

Chairman Peterson reminded the board of the annual election of officers. He said Dr. Aprahamian and Mr. Dykhous have agreed to serve on the Nominating Committee. The election of officers will be held at the June meeting.

ITEM 14. CONFIRM DATE AND TIME OF NEXT MEETING

Chairperson Peterson asked if there were any concerns with the board meeting scheduled for Thursday, June 16, 2016 at 9:00 A.M. (MT). There were none.

Ms. Lebrun left the teleconference at 11:56 AM.

ITEM 15. BOARD COMMENTS

Dr. Robert Wilson said everything looks on track and SDSTA is doing great work as usual.

Vice Chairperson Wheeler complimented the entire staff, including Mr. Headley and Mr. Weinig. He said the optimism expressed at the last meeting still continues today. He said the meetings in Washington D.C. were very positive.

Mr. Headley thanked Ms. Andresen and Ms. Knight for their support and keeping the meeting on task. He said it is clear that the SDSTA has amazing professional people working and advocating for the Sanford Lab. He thanked the board for their continuous support. He also thanked the staff for making forward movement each day at Sanford Lab.

Mr. Engel thanked the board for the opportunity to represent them.

Chairperson Peterson thanked everyone and for working as a team. He wished everyone a Happy St. Patrick's Day and reminded everyone to be safe.

ITEM 16. ADJOURN

Chairperson Peterson asked if anyone had any other questions or comments and called for a motion to adjourn.

Motion by Mr. Wheeler and second by Dr. Robert Wilson to adjourn. Motion passed unanimously.

Meeting adjourned at 12:00 PM.

South Dakota Science and Technology Authority Board of Directors
Telephonic Meeting Minutes
Tuesday, April 19, 2016
Lead, South Dakota

The Board of Directors of the South Dakota Science and Technology Authority convened at 2:00 PM Mountain Time (MT) on Tuesday, April 19, via teleconference. Listening posts for the public were established at the office of the SDSTA at 630 E. Summit Street, Lead, South Dakota, and at the conference room of the South Dakota Department of Tourism and State Development, 711 East Wells Avenue, Pierre, South Dakota.

MEMBERS OF THE BOARD IN ATTENDANCE BY TELEPHONE

Dr. Ani Aprahamian
Mr. Paul Christen
Ms. Patricia Lebrun, Secretary/Treasurer
Mr. Casey Peterson, Chairperson
Mr. Ron Wheeler, Vice-Chairperson
Dr. Robert Wilson

MEMBERS OF THE BOARD WHO WERE NOT IN ATTENDANCE

Mr. Dana Dykhouse
Dr. Heather Wilson

SDSTA STAFF IN ATTENDANCE

Mr. Tim Engel, Legal Counsel (*by telephone*)
Ms. Nancy Geary, Chief Financial Officer
Mr. Mike Headley, Executive Director
Ms. Mandy Knight, Administrative Services Manager
Mr. Noel A. Schroeder, Environment, Safety and Health Director
Ms. Constance Walter, Communications Director

ALSO PRESENT DURING ALL OR PART OF THE MEETING

Mr. Joshua Willhite, Long-Baseline Neutrino Facility FSCF Project Manager

ITEM 1. CALL TO ORDER

Chairman Casey Peterson called the meeting to order. All members were present by roll call except Mr. Dana Dykhouse and Dr. Heather Wilson.

Chairperson Peterson asked participants at the listening posts in Pierre and Lead to identify themselves. There was no response at the Pierre listening post.

ITEM 2. APPROVE AGENDA

Chairman Peterson requested a motion to approve the agenda.

Motion by Mr. Christen and second by Ms. Lebrun to accept the agenda as presented. By roll call vote, the motion passed unanimously.

ITEM 3. DISCUSS EASEMENT FOR A CONVEYOR SYSTEM TO THE OPEN CUT

SDSTA Legal Counsel Mr. Tim Engel said the purpose of the easement is to allow for an overhead rock conveyor system to go across the Ellison Hill, the highway, city property and then deposit the excavated rock into the Open Cut. Mr. Engel referenced the draft Easement that was provided to the board, and reported the city may have some concerns with the issue that relates to the term or

termination date, of the draft Easement. Mr. Engel said that SDSTA would be obligated to indemnify the city if there were any claims that arose out of something SDSTA had done or not done, and that the SDSTA would be obligated to provide proof of insurance. Also, the SDSTA would have an obligation to maintain the conveyor system and dismantle it at the end of the project.

Because a final easement has not been approved by the City of Lead, Mr. Engel recommended a slightly different motion than noted on the agenda.

Motion by Mr. Ron Wheeler and second by Mr. Paul Christen to authorize the chairman, in consultation with executive director and legal counsel, to finalize the terms of, and execute, the easement to the Open Cut.

Mr. Christen asked if the city's only concern is the term? SDSTA Executive Director Mike Headley responded that the feedback from the City Administrator relates to the open-ended nature of the draft. Mr. Headley said he would be willing to shorten the period as long as it supported the needs of the project, but he had not seen any revised language relating to the term yet. LBNF Project Manager Mr. Joshua Willhite and Mr. Headley attended Lead City Commission meetings held on April 4 and 18 and fielded a number of questions. One of the issues would be the dust generated from the dumping of rock into the Open Cut. Mr. Headley said they have been discussing a game plan for dust control methods with some of the residents in the vicinity of the Open Cut.

Dr. Robert Wilson referenced the "Perpetual Easement" in the draft and said 20 years seemed like a long time. He asked if there is a clear reason to keep it open beyond the project and the cost to dismantle the system? Mr. Headley said the language was mimicked from an easement with Homestake for putting rock in the Open Cut. Mr. Headley said it is hoped there would be a possibility for future excavation for other experiments, but at this point there has been no funding from any of the federal agencies. If the SDSTA does not have a reasonable expectation of excavation, the SDSTA would work with the Department of Energy (DOE) to fund the dismantling of the conveyor system.

The cost of construction and operation of the waste rock handling system overall is built into the Long Baseline Neutrino Facility (LBNF) project cost, and LBNF Project Manager Elaine McCluskey is aware of the need for funding of potential dismantling of the conveyor system as well as decommissioning at end of construction. The conveyor system is a tagged asset and could be transitioned to the operations contract and maintained as part of our operations effort.

Mr. Christen asked if the easement is in perpetuity; Mr. Engel responded that it is perpetual, but with conditions. He said if SDSTA does not begin construction within 20 years, it goes away or if it is not needed within 10 years, it has to be removed. He said it is perpetual in that if it was in regular use, then it would go on as long as it was needed.

Mr. Christen asked the timeframe of bringing the rock up from underground? Mr. Headley said it would be approximately two and half years of excavation as the project is currently scoped.

Dr. Robert Wilson asked if the cost of the liability insurance is budgeted? Mr. Engel said this could be added to one of the SDSTA policies at no additional cost. Dr. Wilson asked what would happen if the City of Lead asked to double the insurance? Mr. Engel said he would have to discuss higher limits with the Captive Insurance Company. Currently, it would fall under the SDSTA's second tower of insurance with a \$20M limit of liability.

If the City asked for a significant increase in insurance, then the easement will be brought back to the board for discussion and further consideration.

Chairman Peterson asked about the time sensitivity to complete approval of the easement. Mr. Headley replied that SDSTA is working in parallel with the DOE's process for construction approval and would

like to give assurance to the design process. He said he would like to see the easement approved in the next month so the design for the waste rock handling system is not delayed.

By roll call vote, the motion passed unanimously.

ITEM 4. – BOARD COMMENTS

Chairperson Peterson reminded members of the next regularly scheduled meeting on June 16 at 9am. He asked if board members had any comments.

Mr. Christen had no comment.

Dr. Aprahamian had no comment.

Dr. Robert Wilson had no comment.

Mr. Wheeler said he is glad it is moving forward.

Mr. Headley thanked everyone for their time and appreciated the support. He said the SDSTA will keep pushing forward.

Mr. Engel had no comment.

Chairperson Peterson said he would make sure that any changes to the Easement would be to the SDSTA's advantage and if not, the Board would meet again to discuss and consider the changes.

Chairperson Peterson repeated that the next board meeting will be held on Thursday, June 16 at 9:00 AM (MT).

ITEM 5. – ADJOURN

Chairperson Peterson asked for a motion to adjourn.

Motion by Dr. Robert Wilson and second by Dr. Ani Aprahamian to adjourn. By roll call vote, the motion passed unanimously.

The meeting adjourned at 2:22 PM (MT) on April 19, 2016.

South Dakota Science and Technology Authority
June 16, 2016 Board Meeting

Agenda Item: 05

Audit Committee—Chairperson Peterson

- 5A. Appoint Members to the Audit Committee per Audit Charter—attached.
- 5B. Audit Report for Fiscal Year Ended June 30, 2015 was discussed at the March 17, 2016 board meeting and requested for acceptance at the June 16, 2016 meeting—attached. Motion requested.

Recommended Action:

5B. Motion to accept the Audit Report for Fiscal Year Ended June 30, 2015.

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**South Dakota Science and Technology Authority
June 16, 2016 Board Meeting**

Agenda Item: 05A

Appoint Members to Audit Committee—Chairperson Peterson

5A. Appoint Members to the Audit Committee per Audit Charter—attached.

Recommended Action:
Informational.

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SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

AUDIT COMMITTEE CHARTER

STATEMENT OF MISSION

The mission of the South Dakota Science and Technology Authority (SDSTA) Audit Committee is to be the pro-active steward for oversight of the financial reporting and disclosure process for SDSTA, including the investigation of claimed breaches of ethics, theft, fraud, embezzlement and reports of whistle-blowers. Our responsibility is to the SDSTA Board of Directors to report independently on the results of the oversight so as to assist in maintaining and enhancing the quality of the financial reporting. The Audit Committee is committed to communication between and among directors, the external auditor and Chief Financial Officer (CFO).

A. The Audit Committee has the following responsibilities and duties:

1. Appointment

- Annually be appointed by the SDSTA Board of Directors at their annual meeting in June.
- At least one member will be deemed a “financial expert,” as defined by applicable law and regulation.

2. Review

- Annually review and update this Charter.
- Annually determine the independence of Audit Committee members through a certification by the SDSTA Board of Director’s Chairperson.
- Review the SDSTA’s annual financial statements and any reports or other financial information submitted to or from any governmental body, or the public, including any certification, report, opinion or review rendered by the external auditor or the SDSTA CFO.
- Review any report or memo or other communication from Federal and State regulators and reviewers, and attend as many entrance and exit conferences as possible.

3. External Auditors/CFO/Independent Counsel/Other Advisors

- The Audit Committee shall have the independent authority to engage any legal counsel or other advisors it deems necessary to carry out its duties.
- Periodically consult with the external auditor out of the presence of management about internal controls and the fullness and accuracy of the company’s financial statements.
- Make the selection, retention, and review the performance of, the external auditor, considering independence and effectiveness and approve the fees paid to the external auditor as well as the proposed fee. On an annual basis, the Audit Committee should review and discuss with the external auditor all significant relationships the external auditor has with the company to determine the auditor’s independence and consider the appropriateness of the non-audit services prior to their engagement.
- Periodically meet with the CFO on the results of exams, and be available to CFO for appropriate communications at any time they desire the meeting.

4. Financial Reporting Process

- In consultation with the external auditor, review the integrity of the SDSTA’s financial reporting processes.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

AUDIT COMMITTEE CHARTER

- Consider the external auditor's judgments about the quality and appropriateness of the SDSTA's accounting principles, as applied in its financial reports and as promulgated by the Governmental Accounting Standards Board.
- Consider and forward to the SDSTA Board of Directors, if appropriate, recommendations for major changes to the SDSTA's auditing and accounting principles and practices as suggested by the external auditor, management or the CFO.
- Establish regular and separate systems of reporting to the Audit Committee by management and the external auditor regarding any significant judgments made in management's preparation of the financial statements and the Audit Committee's view of each as to appropriateness of such judgments.
- Following completion of the annual audit, review separately with management and the external auditor any significant difficulties encountered during the course of the audit, including any restrictions on the scope of work, or access to required information.
- Review and resolve any significant disagreement among management and the external auditor in connection with the preparation of the financial statements. Review in detail the passed audit adjustments and the materiality levels used by the external auditor, and the impact of Management's estimates used in the financial statement preparation.
- Review with the external auditor and management the extent to which changes or improvements in financial or accounting practices, as approved by the Audit Committee in prior reports or meetings, have been implemented.

5. Ethical and Legal Compliance

- Establish, review and update periodically a Conflict of Interest Policy and ensure that management has established a system to enforce this Policy.
- Review management's monitoring of compliance with the SDSTA's Conflict of Interest Policy, and verify that management has the proper review system in place to ensure that financial statements, reports, and other financial information disseminated to governmental organizations, and the public, satisfy legal requirements.
- Review with SDSTA's retained legal counsel any legal matter that could have a significant impact on the SDSTA's financial statements.
- Periodically review individual committee member education and obtain resources, seminars and materials to keep the level of member's education current.
- Perform any other activities consistent with this Charter, the SDSTA's By-Laws and governing law, as the Audit Committee or the SDSTA Board of Directors deems necessary or appropriate.

6. Reporting

In order to facilitate the proper execution of its duties and responsibilities, the Audit Committee shall conduct its reviews and investigations in a confidential manner. The Audit Committee shall report to the SDSTA Board the results of the Financial Reporting Process, consultations with External Auditors, the CFO or other Advisors, or any other issues they deem important for the SDSTA Board to meet its responsibilities. These reports shall include, but not be limited to, the results of the annual external audit or any internal audit on financial reports or compliance (including difficulties or disagreements encountered, if any, past

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

AUDIT COMMITTEE CHARTER

adjustments, materiality defined by the auditor, any legal matter having a material impact on the report, management letter comments, etc.), the integrity of the financial reporting system, the appropriateness of the accounting principles applied to the financial reports, the status of internal controls, any suggested change to any of the above systems the Audit Committee thinks should be made, any significant report or communication from any other matter that the Audit Committee deems critical information needed by the SDSTA Board. To the extent permitted by applicable law, the Audit Committee's reports to the Board of Directors shall be delivered in closed session.

The Audit Committee shall strive to provide the Board with the information it needs to manage the reporting and accounting for the SDSTA as well as utilize the reports to manage all of the other risks it faces. These reports will be made when information is received and available. The Annual Schedule below outlines some of the reporting dates anticipated.

7. Budget Process

The Audit Committee will meet with the CFO in March to establish the annual budget for the Audit Committee to cover costs for audit fees, legal fees, consulting fees, continuing education travel and costs and miscellaneous costs.

B. Annual Schedule

The Audit Committee will meet at its discretion but the following is a guideline for business to be conducted during the year:

December-January – Meet with external auditors to discuss preliminary audit findings, letters to management, passed adjustments, materiality, management estimates, and quality and appropriateness of accounting principles.

March-June – Present audit findings, letter of comments and other appropriate information to the SDSTA's Board of Directors at SDSTA annual meeting. Meet to update issues on hiring other outside auditors for review, as deemed necessary, of such areas as EDP, compliance, etc.

September – Request proposal for external audit. Meet with CFO.

October/November/December – Meet with CFO to review any issues regarding the audit. Meet to engage external financial auditor on entrance conference. Review all SDSTA regulators' reports (State and/or Federal). Certify as to committee member's independence.

C. Limitations on the Committee's Role:

While the Audit Committee has the responsibilities and powers as stated above, it is not the Committee's duty to audit the SDSTA's financial statements or to determine that the SDSTA's financial statements are complete and accurate in accordance with generally accepted accounting principles (GAAP), as promulgated by the Governmental Accounting Standards Board. These are the responsibilities of management and the independent auditors.

**South Dakota Science and Technology Authority
June 16, 2016 Board Meeting**

Agenda Item: 05B

Audit Committee Report—Ms. Pat Lebrun

- 5B. Audit Report for Fiscal Year Ended June 30, 2015 was discussed at the March 17, 2016 board meeting and requested for acceptance at the June 16, 2016 meeting—attached. Motion requested.

Recommended Action:

5B. Motion to accept the Audit Report for Fiscal Year Ended June 30, 2015.

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SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

AUDIT REPORT

Fiscal Year Ended June 30, 2015



**State of South Dakota
Department of Legislative Audit
427 South Chapelle
% 500 East Capitol
Pierre, SD 57501-5070**

SOUTH DAKOTA SCIENCE & TECHNOLOGY AUTHORITY
AUTHORITY OFFICIALS
June 30, 2015

Board of Directors:

Casey Peterson, Chairman
Dana Dykhouse, Vice-Chairman
Ron Wheeler, Vice-Chairman
Pat Lebrun, Secretary/Treasurer
Thomas C. Adam, Member
Dr. Ani Aprahamian, Member
Paul Christen, Member
Dr. Heather Wilson, Ex-Officio Member

Executive Director:

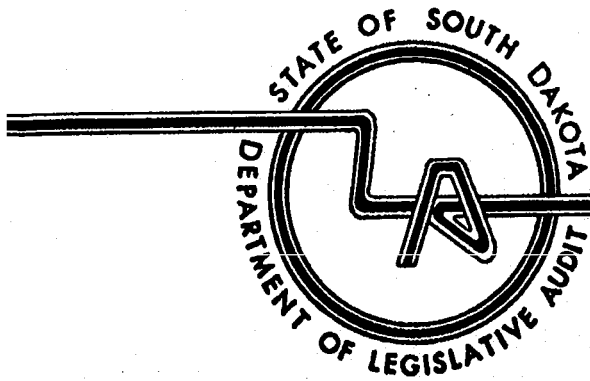
Michael Headley

Chief Financial Officer:

Nancy Geary

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY
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MARTIN L. GUINDON, CPA
AUDITOR GENERAL

INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER
FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS
BASED ON AN AUDIT OF FINANCIAL STATEMENTS
PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

The Honorable Dennis Daugaard
Governor of South Dakota

and

Board of Directors
South Dakota Science and Technology Authority

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the South Dakota Science and Technology Authority (Authority) a business-type activities component unit of the State of South Dakota, as of and for the year then ended June 30, 2015, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements and have issued our report thereon dated December 8, 2015.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Authority's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the Authority's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

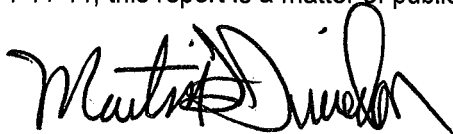
Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Authority's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

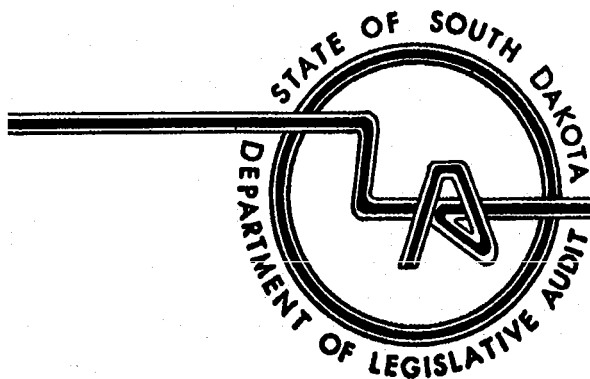
Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose. As required by South Dakota Codified Law 4-11-11, this report is a matter of public record and its distribution is not limited.

A handwritten signature in black ink, appearing to read "Martin L. Guindon", with a stylized flourish at the end.

Martin L. Guindon, CPA
Auditor General

December 8, 2015



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MARTIN L. GUINDON, CPA
AUDITOR GENERAL

INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE FOR EACH MAJOR
FEDERAL PROGRAM AND REPORT ON INTERNAL CONTROL
OVER COMPLIANCE REQUIRED BY OMB CIRCULAR A-133

The Honorable Dennis Daugaard
Governor of South Dakota

and

Board of Directors
South Dakota Science and Technology Authority

Report on Compliance for Each Major Federal Program

We have audited the South Dakota Science and Technology Authority's (Authority), a business-type activities component unit of the State of South Dakota, compliance with the types of compliance requirements described in the *U.S. Office of Management and Budget (OMB) Circular A-133 Compliance Supplement* that could have a direct and material effect on each of the Authority's major federal programs for the year ended June 30, 2015. The Authority's major federal programs are identified for the State of South Dakota Single Audit and included in the summary of auditor's results section of the accompanying Schedule of Current Audit Findings and Questioned Costs.

Management's Responsibility

Management is responsible for compliance with the requirements of laws, regulations, contracts, and grants applicable to its federal programs.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for each of the Authority's major federal programs based on our audit of the types of compliance requirements referred to above.

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and OMB Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations*. Those standards and OMB Circular A-133 require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the Authority's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal program. However, our audit does not provide a legal determination on the Authority's compliance.

Opinion on Each Major Federal Program

In our opinion, the South Dakota Science and Technology Authority complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2015.

Report on Internal Control Over Compliance

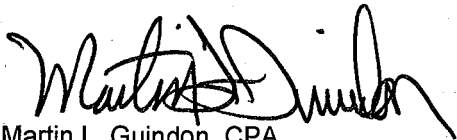
Management of the Authority is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the Authority's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with OMB Circular A-133, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. *A material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. *A significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Purpose of this Report

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of OMB Circular A-133. Accordingly, this report is not suitable for any other purposes. As required by South Dakota Codified Law 4-11-11, this report and our report on compliance for each major federal program are matters of public record and their distribution is not limited.



Martin L. Guindon, CPA
Auditor General

December 8, 2015

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY
SCHEDULE OF PRIOR AND CURRENT AUDIT FINDINGS AND QUESTIONED COSTS

SCHEDULE OF PRIOR AUDIT FINDINGS

Prior Federal Audit Findings:

The prior audit report contained no written audit findings.

Prior (Other) Audit Findings:

The prior audit report contained no written audit findings.

SCHEDULE OF CURRENT AUDIT FINDINGS AND QUESTIONED COSTS

Summary of the Independent Auditor's Results:

Financial Statements

- a. An unmodified opinion was issued on the financial statements of each opinion unit.
- b. No material weaknesses or significant deficiencies were disclosed by our audit of the financial statements.
- c. Our audit did not disclose any noncompliance which was material to the financial statements.

Federal Awards

- d. An unmodified opinion was issued on compliance with the requirements applicable to major programs.
- e. Our audit did not disclose any audit findings that need to be disclosed in accordance with the Office of Management and Budget Circular A-133, Section .510(a).
- f. The federal awards tested as major programs were:
 - 1. SURF (Sanford Underground Research Facility) Operations Support 81.6994297
- g. The dollar threshold used to distinguish between Type A and Type B federal award programs was \$7,000,000 as determined for the State of South Dakota Single Audit for fiscal year 2015.
- h. The South Dakota Science and Technology Authority as a component unit of the State of South Dakota did not qualify as a low-risk auditee.

Current Federal Audit Findings:

There are no written current federal compliance audit findings to report.

Current (Other) Audit Findings:

There are no written current other audit findings to report.



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MARTIN L. GUINDON, CPA
AUDITOR GENERAL

INDEPENDENT AUDITOR'S REPORT

The Honorable Dennis Daugaard
Governor of South Dakota

and

Board of Directors
South Dakota Science and Technology Authority

Report on the Financial Statements

We have audited the accompanying financial statements of the South Dakota Science and Technology Authority (Authority), a business-type activities component unit of the State of South Dakota, as of and for the year then ended June 30, 2015, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the Table of Contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal controls relevant to the preparation and fair presentation of financial statements that are free from material misstatements, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Authority's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Authority as of June 30, 2015, and the changes in financial position and cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Implementation of New Accounting Standards

As described in Note 5 to the financial statements, the Authority implemented the provisions of GASB Statement No. 68, Accounting and Financial Reporting for Pensions – An Amendment of GASB Statement No. 27 and GASB Statement No. 71, Pension Transition for Contributions Made Subsequent to the Measurement Date – An Amendment of GASB Statement No. 68. As discussed in Note 5 to the financial statements, the implementation of these standards resulted in a restatement of beginning net position. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis (MD&A) on pages 9 through 16, the Schedule of Proportionate Share of the Net Pension Liability (Asset) on page 33 and the Schedule of Employer Contributions on page 34 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary and Other Information

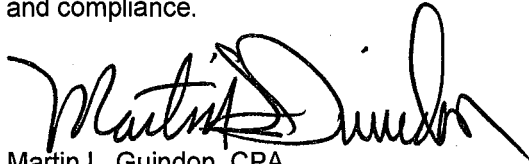
Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Authority's basic financial statements. The Schedule of Operating Expenses and the Schedule of Expenditures of Federal Awards, which is required by the U.S. Office of Management and Budget Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations* listed in the Table of Contents are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Schedule of Operating Expenses and the Schedule of Expenditures of Federal Awards are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule of Operating Expenses and the Schedule of Expenditures of Federal Awards are fairly stated in all material respects in relation to the basic financial statements as a whole.

The listing of the Authority Officials has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 8, 2015 on our consideration of the Authority's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control over financial reporting and compliance.

A handwritten signature in black ink, appearing to read "Martin L. Guindon", with a stylized flourish at the end.

Martin L. Guindon, CPA
Auditor General

December 8, 2015

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

MANAGEMENT'S DISCUSSION AND ANALYSIS JUNE 30, 2015

This section of the South Dakota Science and Technology Authority's (Authority) annual financial report presents management's discussion and analysis of the Authority's financial performance during the fiscal year ended June 30, 2015 (FY 2015). This analysis should be read in conjunction with the financial statements and notes to the financial statements.

The Authority's financial statements include the operations of funds that the Authority has established to achieve its purpose of converting its acquired Homestake Mine property into an underground science and engineering laboratory. The property was donated to the Authority by Barrick Gold in May 2006.

The activity of the Authority is accounted for as a proprietary fund type. The Authority is a component unit of the State of South Dakota and its financial statements are included in the Comprehensive Annual Financial Report of the State of South Dakota.

Included in the financial statements presented is a current year comparison to prior year balance sheet summary, revenue and expense summary, and capital assets. Further reports reflect current year detailed statement of net position, statement of revenue, expense and changes in net position, cash flow, schedule of operating expenses, and schedule of expenditures of federal awards. Comparisons of current year to prior year are important to display increases and decreases in various elements of the financial reports for the Authority. Current year detailed reports provide significant detail for statement of net position, revenues, expenses and cash flows for the Authority.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED) **JUNE 30, 2015**

FINANCIAL HIGHLIGHTS:

- Total assets at year-end decreased to \$119,646,133.
- Current and Other Assets decreased by \$6,509,433, primarily due to the expenditure of funds from the Sanford Gift accounts being held by the State Treasurer on behalf of the Authority.
- Capital Assets increased by \$14,221,450. Page 13 details the major capital asset additions. Furthermore, page 24 summarizes the changes in capital assets by major categories. Notable increases primarily affected the Improvements in Progress designation including the Ross Shaft rehabilitation project as well as other projects for education and science. Also included in this classification is the capital lease through AmWest, Inc. – Hydro Resources that was renegotiated in January 2013 from an operating lease.
- Net Pension Asset is a new classification included in our Statement of Net Position. The Governmental Accounting Standards Board (GASB) recently approved new statements that require governmental entities to disclose pension information concerning our retirement plan in the South Dakota Retirement System (SDRS). (GASB) standards allow entities to use a pension measurement date up to one year prior to the entities reporting period. Therefore, the Authority is using a June 30, 2014 pension measurement date for our fiscal year end June 30, 2015 statements. Requirements include reporting our proportionate share of the collective net pension asset as of the beginning of the initial period of implementation – June 30, 2014. Our proportionate share equals \$3,809,785.
- Deferred Outflows of Resources is also related to the new (GASB) statements concerning pensions. The amounts recorded relate to our proportionate share of the differences between expected and actual experience in pension earnings along with the Authority's pension contributions made subsequent to June 30, 2014. The total Deferred Outflows of Resources equals \$3,366,693.
- Total liabilities at year end increased to \$4,748,902, primarily due to an increase in accounts payable. Outstanding invoices included amounts owed to engineering and construction firms for the Sanford Lab Visitor Center being built at the site previously occupied by the Homestake Visitor Center. Increases were also noted for an engineering firm charged with the ongoing Long Baseline Neutrino Facility (LBNF) project. Additional amounts were owed for construction expenses related to the Jonas Science Building renovations and the CASPAR/BHSU underground facility development. Yet, Long-Term Liabilities decreased for the capital lease liability on the deep pump system.
- Deferred Inflows of Resources relates to the new (GASB) requirements for pension reporting. The amount recorded relates to our portion of the difference between projected and actual investment earnings. Our portion equals \$4,412,373.
- Total restricted net position decreased to \$22,369,484, due to the expenditure of funds received from Mr. Sanford that is held by the State Treasurer on behalf of the Authority. Funds were expended on projects authorized by the Fourth Amendment to the Homestake Gift Agreement including the new Sanford Lab Visitor Center and for additional underground laboratory space. However, restricted net position did increase for the Net Pension Asset along with Deferred Outflows and Deferred Inflows related to pension balance. These funds are restricted for pension benefits.
- Unrestricted net position decreased to \$4,350,993.
- Total net position at year end increased to \$113,851,551.
- Charges for Services increased slightly to \$207,254. Revenue from Homestake increased slightly due to an increase in water being treated and discharged for Homestake.
- Operating Grants increased to \$19,373,689. The revenue received in this classification includes \$14,200,335 received from Lawrence Berkeley National Laboratory, \$4,520,472 from Fermi National Lab, and \$652,882 from the SD Governor's Office of Economic Development (GOED) and various smaller universities.
- Pension Related Revenue is our proportionate share of pension revenue from South Dakota Retirement System (SDRS) at \$160,924.
- Capital Grants and Contributions increased to \$7,194,368 (up \$5,164,368 from the prior year). The revenue received in this category includes \$3,950,000 from the State Legislature for the Ross Shaft rehabilitation project, \$2,000,000 from GOED for the Sanford Lab Visitor Center and Jonas Science Building renovations, \$595,000 received from private contributions, fixed assets valued at \$454,308 received from SD School of Mines & Technology, as well as \$195,060 received from Black Hills State University (BHSU) reserved for the BHSU underground campus.
- Investment Earnings decreased to \$216,435 compared to \$510,356 in the previous year primarily due to lower cash being held by the State Treasurer on behalf of the Authority. Thus a lower amount of funds being invested.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

JUNE 30, 2015

FINANCIAL HIGHLIGHTS (Continued)

- Total expenses for the Authority were \$21,046,711, which represents a small increase of 2.47% from the previous year. Of this \$21,046,711 the major expenses were contractual services – 42.6 percent, personal services – 41.4%, and supplies, materials, and operating expenses – 6.1 percent.
- A Prior Period Adjustment of \$2,045,761 was recorded for the implementation of recent GASB pronouncements since the Authority is using a June 30, 2014 pension measurement date for our fiscal year end June 30, 2015 statements. This includes our proportionate share of the collective net pension asset as of the beginning of the initial period of implementation – June 30, 2014 along with the contributions the Authority made to the pension plan between the measurement date beginning period and the beginning of the Authority's current fiscal year.
- Net position increased by \$6,200,983 for fiscal year 2015.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED) JUNE 30, 2015

FINANCIAL STATEMENT ELEMENTS:

NET POSITION

	2015	2014	Dollar Change	Percent Change
Current and Other Assets	\$ 28,183,753	\$ 34,693,186	\$ (6,509,433)	-18.76%
Capital Assets	87,652,595	73,431,145	14,221,450	19.37%
Net Pension Asset	3,809,785	-	3,809,785	100.00%
Total Assets	119,646,133	108,124,331	11,521,802	10.66%
Pension Related Deferred Outflows	3,366,693	-	3,366,693	100.00%
Total Deferred Outflows of Resources	3,366,693	-	3,366,693	100.00%
Long-Term Liabilities Outstanding	686,728	747,623	(60,895)	-8.15%
Other Liabilities	4,062,174	1,771,901	2,290,273	129.26%
Total Liabilities	4,748,902	2,519,524	2,229,378	88.48%
Pension Related Deferred Inflows	4,412,373	-	4,412,373	100.00%
Total Deferred Inflows of Resources	4,412,373	-	4,412,373	100.00%
Net Position:				
Net Investment in Capital Assets	87,131,074	72,795,253	14,335,821	19.69%
Restricted	22,369,484	27,206,266	(4,836,782)	-17.78%
Unrestricted	4,350,993	5,603,288	(1,252,295)	-22.35%
Total Net Position	\$ 113,851,551	\$ 105,604,807	\$ 8,246,744	7.81%

CHANGE IN NET POSITION

	2015	2014	Dollar Change	Percent Change
Revenues				
Program Revenues:				
Charges for Services	\$ 207,254	\$ 178,008	\$ 29,246	16.43%
Operating Grants	19,373,689	16,004,934	3,368,755	21.05%
Miscellaneous	95,024	109,249	(14,225)	-13.02%
Pension Related Revenue	160,924	-	160,924	100.00%
Capital Grants and Contributions	7,194,368	2,030,000	5,164,368	254.40%
General Revenues:				
Investment Earnings	216,435	510,356	(293,921)	-57.59%
Total Revenue	27,247,694	18,832,547	8,415,147	44.68%
Program Expenses:				
Science and Technology Authority	21,046,711	20,539,376	507,335	2.47%
Total Expense	21,046,711	20,539,376	507,335	2.47%
Change in Net Position	6,200,983	(1,706,829)	7,907,812	463.30%
Prior Period Adjustment	2,045,761	-	2,045,761	100.00%
Net Position-Beginning	105,604,807	107,311,636	(1,706,829)	-1.59%
Net Position-Ending	\$ 113,851,551	\$ 105,604,807	\$ 8,246,744	7.81%

By June 30, 2015, the Authority had invested \$87,652,595 in a broad range of capital assets, including computer equipment, land, buildings, improvements to infrastructure and the underground, and various machinery and equipment. \$20,551,152 of this \$87,652,595 (approximately 23% of this total value) was donated by Barrick Gold. This amount represents a net increase (including additions and deductions) of \$14,221,450, or 19.37 percent, over the last year.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

JUNE 30, 2015

CAPITAL ASSETS (Net of Depreciation)

	2015	2014	Change
Improvements	\$ 29,745,184	\$ 30,618,184	\$ (873,000)
Underground	17,250,828	17,055,422	195,405
Buildings	5,761,452	5,907,205	(145,753)
Computer Equipment	59,147	17,147	42,000
Equipment	7,332,534	6,993,791	338,744
Construction in Progress	24,336,743	9,679,529	14,657,214
Land	1,579,298	1,534,038	45,260
Infrastructure	1,447,426	1,486,033	(38,607)
Furniture	39,941	44,931	(4,990)
Archive Material	70,000	70,000	-
Auto	30,043	24,865	5,178
Total Capital Assets	\$ 87,652,596	\$ 73,431,145	\$ 14,221,451

This year's major capital asset additions included:

Purchased Capital Assets:

Computer Servers/Storage Arrays	\$ 89,008
2009 Chevy G3500 Passenger Van	16,900
Davis Campus Dehumidification System	508,965
Water Treatment Plant Mix Tank	110,642
Yates Work Platform	30,419
JLG T500 Scissor Lift	20,470
Concrete Bucket & Cement Hopper	36,705
HVAC Unit	17,359

Capital Assets Transferred from State:

Yates Rope Dog System	227,217
Robotic Shot Tech Arm System	171,390
Mini Track Loader	22,546
IT Generator	26,208
(2) Kubota Utility RTV's	23,085
Topcon GOT Data Collector/Micro1000 Data Loggers	25,260
Vertical Diesel Symo Power Unit	14,023
HD Video Conferencing System with Camera	13,990

Improvements (Current Year Additions):

Underground Mitigation Improvements	163,874
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Improvements in Progress (Current Year Additions):

Ross Shaft Rehabilitation	6,331,306
CASPAR Experiment Development	668,419
CASPAR Facility Development	2,356,854
BHSU Jonas Science Building Renovations	1,383,791
Sanford Lab Homestake Visitor Center	4,460,206

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

JUNE 30, 2015

LONG-TERM DEBT

At the year-end, the Authority had \$686,728 in other long-term obligations. This is a decrease of 8.15 percent as shown below.

	2015	2014	Total Dollar Change	Total Percentage Change
Compensated Absences	\$ 342,574	\$ 284,439	\$ 58,135	20.44%
Capital Acquisition Lease	344,154	463,184	(119,030)	-25.70%
	<u>\$ 686,728</u>	<u>\$ 747,623</u>	<u>\$ (60,895)</u>	<u>-8.15%</u>

- (1) The Authority is liable for the accrued vacation leave payable to all full-time employees. In addition, the Authority is liable for a portion of the earned sick leave of employees who have been employed for seven consecutive years. The increase is due to an increase in number of employees and the corresponding amount of leave accumulated and outstanding at the end of the year. Additionally a prior operating lease was renegotiated resulting in the conversion to a capital lease. Note (4) Long-Term Debt in the Notes to Financial Statements on page 25 details this capital lease.

ECONOMIC FACTORS

- After the Homestake Mine site was selected by the National Science Foundation (NSF) on July 10, 2007, as the preferred site for the proposed national Deep Underground Science and Engineering Laboratory (DUSEL), Lawrence Berkeley National Laboratory and the South Dakota Science and Technology Authority negotiated a Memorandum of Understanding (MOU). This MOU outlined collaborative activities that would be necessary to carry out the technical design development program agreement to develop the former Homestake Mine into the DUSEL.
- The DUSEL Design Team's proposal for re-entry to continue to the 7400' level had been rejected by the National Science Foundation due to the costs involved. Thus the DUSEL (Deep Underground Science and Engineering Laboratory) concept was rejected. The current vision of the Department of Energy (DOE) proposes science labs at the 800' level and at the 4850' level in the excavated Davis Campus close to the Yates Shaft. The design team has adopted the evolving vision of Lawrence Berkeley National Laboratory (LBNL) and the DOE into the Sanford Underground Research Facility (SURF). A report released from the Particle Physics Project Prioritization Panel (P5) in May 2014, outlined the 10-year strategic plan for high-energy physics in the United States. The report provides strong support for science programs envisioned for (SURF) including research into neutrinos and dark matter, both of which are being researched at Sanford Lab. This panel formally advises both the DOE Office of Science and NSF on support for physics. We expect this report to play a key role in the federal government funding process for years to come. The Authority is better secured to receive continued funding for Operations in the future.
- The Authority's Board of Directors (with additions throughout the year) approved a capital budget for fiscal year 2015 of \$18,566,715 towards the Ross Shaft rehabilitation project, Yates Shaft improvements, underground hazard mitigation projects, as well as other capital projects. Additional projects included experiment development for the Compact Accelerator System for Performing Astrophysical Research (CASPAR), as well as facility development for (CASPAR) and Black Hills State University on the 4850-foot level. Further projects included the Black Hills State University Jonas Science Building renovation and design and construction of the Sanford Lab Visitor Center (SLVC) located above the Open Cut in Lead. Actual expenditures for the year totaled \$16,044,227 as several of these projects approved funding extend into fiscal year 2016. Funding for these projects had been designated primarily from the Sanford funds including a portion of Gift No. 2. The Fourth Amendment to the Homestake Gift Agreement that was signed in May 2013, whereby the Authority may expend up to \$7,000,000 on three projects related to science education facilities including the Sanford Lab Visitor Center. It was also agreed that any part of Gift No. 2 not used for the above projects could be used for additional

ECONOMIC FACTORS (Continued)

underground laboratory space and related infrastructure to access and support laboratory spaces through the shaft. Given the construction budget of the (SLVC), the Jonas Science Building renovation costs, and the anticipated cost of the third science education facility project at the Yates Dry Building, it was not possible to undertake the upgrades to the Yates Dry with current funding. This was acknowledged by the signing of the Fifth Amendment to the Homestake Gift Agreement in February 2015. The Fourth Amendment to the Homestake Gift Agreement stipulated that the Authority must raise \$1.5 million from other sources for the Black Hills State University Jonas Science Building renovation project and \$1 million for the Sanford Lab Visitor Center Project. The Authority secured a \$2 million Future Fund grant from the State of South Dakota in October 2013, which was expended in fiscal year 2015. An additional \$500,000 was received in July 2014 from Great Plains Education Foundation to finalize our monetary obligations. Black Hills State University supported the underground facility with \$200,000. Additional donations of \$95,000 were received from other private contributors. Additional funding of \$3,950,000 received in March 2015 from the SD State Legislature was expended on the designated Ross Shaft rehab project. The Authority's Board of Directors endorsed a budget of \$736,569 in favor of Authority supported activities. Actual expenses totaled \$737,599. Thus, the Authority was slightly over budget for the year.

- Additionally, an operations budget of \$13,974,507 had been approved to manage and operate the facility for the federal fiscal year October, 2014 – September 2015. Modifications to Subcontract No. 6994297 were signed with Lawrence Berkeley National Laboratory for this additional DOE funding. Actual expenditures are estimated at \$14,065,301. Thus, the Authority will be slightly over their budget allotment for the federal fiscal year.
- Further funding was received in fiscal year 2015 through LBNL in support of various small projects including the LUX (Large Underground Xenon) experiment. This award reimbursed the Authority for expenses incurred in support of the LUX for various materials and supplies as well as a percentage of the salaries of the Design Team members, for their project management skills essential to the work being performed. One other small subcontract supplied further funding to the Authority. Included was support for the G2-LZ (Generation 2 LUX-Zeplin) investigations.
- In late 2012, the DOE approved the Long Baseline Neutrino Experiment (LBNE) to proceed with preliminary designs to construct a large detector at SURF. Contracts have been executed with Fermi National Accelerator Laboratory (FNAL) for these efforts. Funds were received for professional engineering management services for design and construction as well as efforts supporting the National Environmental Policy Act (NEPA) process and required environmental assessment. Other contracts added support for Phase 2 - Geotechnical Exploration for LBNE at SURF as well as preliminary engineering design of a railveyor system for transporting excavated rock from the underground. Additional support was received for Excavation and Preliminary Design, Building/Site Infrastructure, as well as funding for international support. In October 2014, as part of the internationalization effort, a group of physicists and engineers from the Long Baseline Neutrino Oscillation (LBNO) collaboration in Europe visited SURF. Presentations were made to demonstrate the capabilities of the SURF facility. The Sanford Lab was named to remain the host for the (LBNE) related detectors. After further meetings, the (LBNE) collaboration officially dissolved and transferred all responsibilities to a new collaboration referred to as the Long Baseline Neutrino Facility (LBNF) consisting of United States and International support. The (LBNF) and the associated Deep Underground Neutrino Experiment (DUNE) will send neutrinos through the earth from Fermilab in Batavia, Illinois to SURF here in Lead, S.D. This will be the first truly international megascience project hosted in the United States. DOE support continues into fiscal year 2016 for the (LBNF) project.
- Additional funding was received during the fiscal year from various institutions including Case Western University, University of North Carolina, and the University of Minnesota. Funds were received at SURF to support expenditures related to a cryocooler design for the LZ (LUX-Zeplin) experiment, support for the Majorana experiment located at the 4850-foot level Davis Campus, as well as the development of Deep Underground Gravity Laboratories (DUGL) on three underground levels. Support continues in fiscal year 2016 from all institutions except Case Western University.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONCLUDED)

JUNE 30, 2015

ECONOMIC FACTORS (Continued)

- A Memorandum of Understanding (MOU) was signed in November 2014 between the Authority and a commercial organization – Xilinx, Inc. to establish an experiment located near the Davis Campus. Their testing measures failure rates and modes in electronic chips. We are charging them for lab space, experiment access fees, and SURF scientific support. This agreement will continue into fiscal year 2016.
- The Authority's fiscal year 2016 capital budget provides for spending \$12,215,257. A portion of this budget was previously approved in fiscal year 2015 but was not spent. Projects include continuing the Ross Shaft rehabilitation project, concluding the (CASPAR) experiment development and facility development on the 4850-foot level as well as the underground facility for Black Hills State University. Concluding the Black Hills State University Jonas Science Building renovation and the construction of the Sanford Lab Visitor Center in Lead are both on the near term horizon. Funding remains for these projects primarily from the Sanford funds including a portion of Gift No. 2. New projects include surface and underground upgrades for the future G2-LZ (Generation 2 LUX-Zeplin) experiment that will be located in the Davis Campus, as well as the procurement of xenon for the LZ experiment. Funding for the LZ projects will be facilitated through a letter agreement with the Governor's Office of Economic Development (GOED) for \$6,000,000 along with borrowing funds from private investors. On September 1, 2015, the South Dakota Community Foundation signed a letter of intent to loan the Authority \$2,000,000 towards to purchase of xenon. The Authority's Board of Directors also approved a budget of \$756,146 in favor of Authority supported activities.
- A Letter of Agreement dated February 24, 2014 between the Authority and Black Hills State University (BHSU) provides up to \$300,000 per year for three years from the Authority to BHSU to administer the Sanford Science Education Center. Matching funds of \$150,000 per year by BHSU was documented. Funding for this agreement originated from a Letter of Agreement #1524 between the SD Governor's Office of Economic Development (GOED) and the Authority. The full period of performance extends from June 2014 through May 2017. The first \$300,000 from the Governor's office was received in September 2014 and was extended to BHSU on a reimbursement schedule. Year two funding of \$300,000 was received from GOED in July 2015. Additional support of \$125,000 for education programs and the Sanford Science Education Center was received from Great Plains Education Foundation in August 2015.
- Additionally, an operations budget of \$13,984,422 has been submitted for approval to manage and operate the facility for the federal fiscal year October, 2015 – September 2016. \$4,257,960 has been added to this request in support of the Ross Shaft rehabilitation for the period of January 2016 through September 2016. Modification No. 33 to Subcontract No. 6994297 has been signed with Lawrence Berkeley National Laboratory extending the subcontract through November 30, 2015. Additional funding was increased to cover expenses until the current budget for funding operations at SURF is approved.
- The Authority is in compliance with all legal and environmental regulations.

CONTACTING THE AUTHORITY'S FINANCIAL MANAGEMENT

This financial report is designed to provide our citizens, taxpayers, customers, and investors and creditors with a general overview of the Authority's finances and to demonstrate the Authority's accountability for the money it receives. If you have any questions about this report or need additional information, contact the South Dakota Science and Technology Authority, 630 East Summit Street, Lead, SD 57754.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

STATEMENT OF NET POSITION JUNE 30, 2015

ASSETS

Current Assets

Cash in Local Bank and Petty Cash	\$ 1,233,440
Cash on Deposit with State Treasurer	20,086,611
Accounts Receivable	3,427,534
Interest Receivable	67,115
Prepaid Expenses	382,939
Inventory of Supplies & Warehouse	2,986,114
Total Current Assets	28,183,753

Noncurrent Assets

Net Pension Asset	3,809,785
Land	1,579,298
Underground	17,250,828
Improvements in Progress	24,336,743
Buildings, Machinery, Equipment and Infrastructure (Net) (Note 3)	44,485,726
Total Noncurrent Assets	91,462,380

TOTAL ASSETS	119,646,133
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Deferred Outflows of Resources

Pension Related Deferred Outflows	3,366,693
Total Deferred Outflows of Resources	3,366,693

LIABILITIES

Current Liabilities

Accounts Payable	3,155,481
Accrued Wages and Benefits	386,751
Accrued Leave, Benefits, and Capital Acquisition Lease (Note 4)	519,942
Total Current Liabilities	4,062,174

Long-Term Liabilities

Accrued Leave, Benefits, and Capital Acquisition Lease Net of Current Portion (Note 4)	686,728
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TOTAL LIABILITIES	4,748,902
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Deferred Inflows of Resources

Pension Related Deferred Inflows	4,412,373
Total Deferred Inflows of Resources	4,412,373

NET POSITION

Net Investment in Capital Assets	87,131,074
Restricted for:	
Mine Closure	1,378,756
Insurance	-
Indemnification	10,000,000
Interim Lab-Sanford	4,396,549
Sanford Center for Science Education	3,830,074
Pension	2,764,105
Unrestricted Net Position	4,350,993

TOTAL NET POSITION	\$ 113,851,551
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The accompanying notes are an integral part of this statement.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

**STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION
FOR THE YEAR ENDED JUNE 30, 2015**

Operating Revenue	
Charges for Goods and Services	\$ 207,254
Operating Grants	19,373,689
Miscellaneous	95,024
Pension Related Revenue	160,924
Total Operating Revenue	19,836,891
Operating Expenses	
Personal Services	8,716,054
Travel	164,530
Contractual Services	8,973,835
Supplies, Materials and Other Operating Expenses	1,288,714
Amortization Expense	114,371
Depreciation Expense	1,742,887
Total Operating Expenses	21,000,391
Operating Loss	(1,163,500)
Nonoperating Revenues	
Interest Revenue	216,435
Other Expense	(46,320)
Total Nonoperating Revenues	170,115
Loss Before Capital Grants	(993,385)
Capital Grants	7,194,368
Change in Net Position	6,200,983
Net Position -- Beginning of Year, restated	107,650,568
Net Position -- End of Year	\$ 113,851,551

The accompanying notes are an integral part of this statement.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

STATEMENT OF CASH FLOWS FOR THE YEAR ENDED JUNE 30, 2015

Cash Flows from Operating Activities:

Other Operating Cash Receipts	\$ 298,769
Cash Receipts from Operating Grants	17,807,355
Cash Payments to Employees for Services	(9,093,013)
Cash Payments to Suppliers of Goods and Services	(9,198,292)
Net Cash Used in Operating Activities	(185,181)

Cash Flows from Capital and Related Financing Activities:

Grant Revenue	6,661,739
Purchase of Capital Assets	(14,541,021)
Principal Paid on Capital Debt	(114,371)
Interest Paid on Capital Debt	(15,629)
Net Cash Used in Capital and Related Financing Activities	(8,009,282)

Cash Flows from Investing Activities:

Interest Earnings	221,140
Net Cash Provided by Investing Activities	221,140

Net decrease in Cash and Cash Equivalents (7,973,323)

Cash and Cash Equivalents at Beginning of Year 29,293,374

Cash and Cash Equivalents at End of Year **\$ 21,320,051**

Reconciliation of Operating Loss to Net Cash Used in Operating Activities:

Operating Loss	\$ (1,163,500)
<i>Adjustments to Reconcile Operating Loss to Net Cash Used in Operating Activities:</i>	
Depreciation & Amortization Expense	1,857,258
<i>Change in Assets and Liabilities:</i>	
Receivables	(1,569,842)
Prepaid Expenses	191,573
Inventory of Supplies	5,118
Net Pension Asset	(2,318,858)
Decrease(Increase) in Deferred Outflow of Resources - Pension	(2,811,858)
Increase (Decrease) Deferred Inflow of Resources - Pension	4,412,373
Accounts and Other Payables	1,032,094
Accrued Wages Payable	64,191
Accrued Leave Payable	116,270
Net Cash Used in Operating Activities	\$ (185,181)

Continued on next page.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

**STATEMENT OF CASH FLOWS (CONTINUED)
FOR THE YEAR ENDED JUNE 30, 2015**

Cash and Cash Equivalents:

Cash in Local Bank	\$ 1,233,390
Petty Cash	50
Cash with State Treasurer	20,086,611
Total Cash and Cash Equivalents	\$ 21,320,051

Non-Cash Capital and Related Financing Activities:

Loss on Disposal of Assets	515
Donation of Capital Assets From the School of Mines	389,008
Donation of Inventory From the School of Mines	65,300

The accompanying notes are an integral part of this statement.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

NOTES TO FINANCIAL STATEMENTS

JUNE 30, 2015

(1) Summary of Significant Accounting Policies

a. Reporting Entity

The South Dakota Science and Technology Authority (Authority) was created and organized by Chapter 1-16H of the South Dakota Codified Laws. The purposes of the Authority are to foster and facilitate scientific and technology investigation, experimentation, and development by creating a mechanism through which laboratory, experimental and development facilities may be acquired, developed, constructed, maintained, operated, and decommissioned. The initial focus of the Authority is to support the transfer of the Homestake Gold Mine in Lead, South Dakota for development by the research community to become the world's premier Underground Science and Engineering Laboratory; more specifically, the Sanford Underground Research Facility (SURF).

The Authority is a business type component unit of the State of South Dakota (the State). As such, the accompanying financial statements are included in the Comprehensive Annual Financial Report of the State of South Dakota.

b. Fund Accounting

The Authority Fund is accounted for as an enterprise fund. Enterprise funds are used to account for operations (a) that are financed and operated in a manner similar to private business enterprises, where the intent of the governing body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges; or (b) where the governing body has decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control, accountability, or other purposes.

c. Basis of Accounting

The Authority Fund follows the accrual basis of accounting. Revenues are recognized when they are earned, and expenses are recognized when they are incurred.

d. Inventory of Supplies

Inventory of supplies consists primarily of expendable equipment/supplies, donated and purchased, not yet in service. Donated inventory of supplies are valued at their estimated fair value on date of donation. Purchased equipment values are reported at cost. Reported cost values include ancillary charges necessary to place the asset into its intended location and condition for use at a later date.

e. Capital Assets

Capital assets include land, buildings, machinery and equipment, and all other tangible or intangible assets that are used in operations and that have initial useful lives extending beyond a single reporting period. Infrastructure assets are long-lived capital assets that normally are stationary in nature and normally can be preserved for a significantly greater number of years than most capital assets.

Capital assets are recorded at historical cost. Donated capital assets are valued at their estimated fair value on the date donated. Reported cost values include ancillary charges necessary to place the asset into its intended location and condition for use. Subsequent to initial capitalization, improvements or betterments that are significant and which extend the useful life of a capital asset are also capitalized.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

JUNE 30, 2015

(1) Summary of Significant Accounting Policies (Continued)

e. Capital Assets (Continued)

Depreciation of all exhaustible capital assets is recorded as an expense in the Statement of Revenues, Expenses, and Changes in Net Position, with net capital assets reflected in the Statement of Net Position. Accumulated depreciation is reported on the Statement of Net Position.

Capitalization thresholds (the dollar values above which asset acquisitions are added to the capital asset accounts), depreciation methods, and estimated useful lives of capital assets reported in the Authority's financial statements are as follows:

	Capitalization Threshold	Depreciation Method	Estimated Useful Life
Land and Land Rights	All Land	N/A	N/A
Improvements	\$ 5,000	Straight-line	10-50 yrs.
Infrastructure	5,000	Straight-line	25-50 yrs.
Buildings	5,000	Straight-line	25-50 yrs.
Automobiles, Furniture, Machinery and Equipment	5,000	Straight-line	5-75 yrs.

f. Revenue and Expense Classifications

In the Statement of Revenues, Expenses, and Changes in Net Position, revenues and expenses are classified in a manner consistent with how they are classified in the Statement of Cash Flows. That is, transactions for which related cash flows are reported as capital and related financing activities, non-capital financing activities, or investing activities are not reported as components of operating revenue or expenses. The Authority's propriety fund distinguishes between operating and non-operating revenues and expenses. Operating revenues and expenses of the Authority consist of reimbursement of the costs of operations from Homestake Mining Company and other entities, and the costs of providing those services, including depreciation. All other revenues and expenses are reported as non-operating.

g. Cash and Cash Equivalents

Cash includes cash on hand, demand deposits, and participating interest in the State's internal investment pool held by the State Treasurer. The amount held in the State's internal investment pool is reported at fair value. The Authority essentially has access to the entire amount of their cash resources on demand. Accordingly, equity in the cash management pool is considered to be cash and cash equivalents for the purpose of the Statement of Cash Flows.

h. Equity Classifications

Equity is classified as net position and is displayed in three components:

1. Net investment in capital assets, consists of capital assets, including restricted capital assets, net of accumulated depreciation (if applicable) and reduced by the outstanding balances of any bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvements of those assets.
2. Restricted net position, consists of net position with constraints placed on their use either by (a) external groups such as creditors, grantors, contributors, or laws and regulations of other governments; or (b) law through constitutional provisions or enabling legislation.
3. Unrestricted net position, all other net position that do not meet the definition of "restricted" or "net investment in capital assets."

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

JUNE 30, 2015

(1) Summary of Significant Accounting Policies (Concluded)

i. Application of Net Position

It is the Authority's policy to first use restricted net position, prior to the use of unrestricted net position, when an expense is incurred for purposes for which both restricted and unrestricted net position are available.

j. Accrued Leave

Compensated absences consist of vacation and sick leave earned. The vacation leave is earned by full-time employees at the rate of 4.62 hours per pay period, increasing to 6.16 hours per pay period after 15 years of service. The vacation leave may accumulate only to a maximum of twice the annual accrual. Upon retirement or resignation, only full-time employees with 180 days of continuous service will be paid for accumulated vacation leave. Sick leave is earned at the rate of 4.31 hours per pay period. Upon termination, some employees are entitled to receive compensation for a portion of their sick leave balance. Those with seven years of service or more will receive compensation at the rate of 25 percent of their balance up to a maximum of 480 hours.

k. Pensions

For purposes of measuring the net pension liability (asset), deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense (revenue), information about the fiduciary net position of the South Dakota Retirement System (SDRS) and additions to/deletions from SDRS's fiduciary net position have been determined on the same basis as they are reported by SDRS. The Authorities contributions and net pension liability (asset) are recognized on an accrual basis of accounting.

(2) Deposits and Investments

Deposits

Management of the State's internal investment pool is the statutory responsibility of the South Dakota Investment Council (SDIC). The investment policy and required risk disclosures for the State's internal investment pool are presented in the audit report of the South Dakota Investment Council, which can be obtained by contacting the Department of Legislative Audit, 427 South Chapelle, c/o 500 East Capitol, Pierre, South Dakota 57501.

Custodial credit risk is the risk that in the event of a bank failure, the Authority's deposits may not be returned to it. The Authority does not have a deposit policy for custodial credit risk. None of the Authority's deposits were exposed to custodial credit risk.

Investments

In general, SDCL 1-16H-18 permits funds to be invested in (a) direct obligations of, or obligations the principal of the interest on which are fully guaranteed or insured by, the United States of America; or (b) obligations of any solvent insurance company or other corporation or business entity if rated in the two highest classifications established by a standard rating service or insurance companies or a nationally recognized rating agency; or (c) short term discount obligations of the Federal National Mortgage Association; or (d) obligations of any state of the United States or any political subdivision, public instrumentality, or public authority of any state of the United States, which obligations are not callable before the principal is to be paid, are fully secured as to both sufficiency and timely payment by, and payable solely from, obligations described in (a). The Authority did not have any investments as of June 30, 2015.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

JUNE 30, 2015

(3) Changes in Capital Assets

A summary of changes in capital assets for the year ended June 30, 2015 is as follows:

	Balance June 30, 2014	Reclassified*	Increases	Decreases	Balance June 30, 2015
Business-Type Activities:					
Capital Assets, not Being Depreciated:					
Land	\$ 1,534,038	\$ -	\$ 45,260	\$ -	\$ 1,579,298
Underground	17,055,422	31,531	163,875	-	17,250,828
Archive Materials	70,000	-	-	-	70,000
Construction Work in Progress (Note 8)	9,679,529	(555,410)	15,212,624	-	24,336,743
Total Capital Assets, not Being Depreciated	28,338,989	(523,879)	15,421,759	-	43,236,869
Capital Assets, Being Depreciated:					
Equipment Under Capital Lease	883,945	-	-	-	883,945
Automobiles	79,255	-	16,900	9,850	86,305
Buildings	7,223,086	-	-	-	7,223,086
Furniture	74,212	-	-	-	74,212
Computer Equipment	362,465	54,283	34,725	-	451,473
Improvements	33,812,540	-	-	-	33,812,540
Infrastructure	1,658,242	-	-	-	1,658,242
Machinery and Equipment	8,553,255	1,091,401	241,399	65,179	9,820,876
Total Capital Assets, Being Depreciated	52,647,000	1,145,684	293,024	75,029	54,010,679
Total Capital Assets, Before Depreciation	80,985,989	621,805	15,714,783	75,029	97,247,548
Less Accumulated Depreciation:					
Equipment Under Capital Lease	248,053	-	114,371	-	362,424
Automobiles	54,390	-	10,737	8,865	56,262
Buildings	1,315,880	-	145,753	-	1,461,633
Computer Equipment	345,318	36,733	10,275	-	392,326
Furniture	29,280	-	4,990	-	34,270
Improvements	3,194,357	-	873,000	-	4,067,357
Infrastructure	172,209	-	38,607	-	210,816
Machinery and Equipment	2,195,357	178,060	659,528	23,080	3,009,865
Total Accumulated Depreciation	7,554,844	214,793	1,857,261	31,945	9,594,953
Capital Assets, Net	\$ 73,431,145	\$ 407,012	\$13,857,523	\$ 43,084	\$ 87,652,595

*Reclassifications are due to the Authority performing analysis of assets that were previously grouped in construction work in progress as well as equipment being put into service from inventory of supplies. Various systems or devices were transferred to equipment placed in service as of June 30, 2015.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

JUNE 30, 2015

(4) Long-Term Debt

A summary of changes in long-term debt follows:

	Beginning Balance	Additions	Deletions	Ending Balance	Due Within One Year
Accrued Compensated Absences	\$ 568,878	\$ 571,931	\$ 455,661	\$ 685,148	\$342,575
Capital Acquisition Lease	635,892	-	114,371	521,521	177,367
	<u>\$ 1,204,770</u>	<u>\$ 571,931</u>	<u>\$ 570,032</u>	<u>\$ 1,206,669</u>	<u>\$519,942</u>

Capital Acquisition Lease

The Authority leases a deep level pump system from AmWest, Inc. - Hydro Resources. The lease is due in monthly installments of \$35,000 per month through December 31, 2017. The Interest Rate is 4%. \$521,521

This lease meets the criteria to be called a capital lease; however, since the payments on this lease are funded under the Department of Energy contract through Lawrence Berkeley National Laboratory (LBNL) title will actually vest with LBNL rather than with the Authority. Because this meets the definition of a capital lease, the Authority has recorded the related asset and liability. The asset is being fully depreciated over the term of the lease and will be removed from the books at the end of the lease.

The annual requirements to amortize long-term debt outstanding as of June 30, 2015, are as follows:

	Capital Acquisition Lease	
	Interest	Principal
2016	\$ 17,633	\$ 177,367
2017	10,406	184,594
2018	2,940	159,560
Total	<u>\$ 30,979</u>	<u>\$ 521,521</u>

Total cost and accumulated amortization for the capital lease is as follows:

Gross amount of assets under capital lease	\$ 883,945
Accumulated amortization	362,424
	<u>\$ 521,521</u>

The purchase price at the commencement of the financing (capital acquisition) lease was:

Principal	\$ 883,945
Interest	91,055
Total	<u>\$ 975,000</u>

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

JUNE 30, 2015

(5) Prior Period Adjustments

A Prior Period Adjustment was recorded for the implementation of recent GASB pronouncements relevant to our retirement/pension plan, since the Authority is using an allowable June 30, 2014 pension measurement date for our fiscal year end June 30, 2015 statements. This includes our proportionate share of the collective net pension asset as of the beginning of the initial period of implementation – June 30, 2014 along with the contributions the Authority made to the pension plan between the measurement date beginning period and the beginning of the Authority's current fiscal year. Beginning Net Position was restated to reflect the related net pension assets and deferred outflows of resources as of July 1, 2014 in the amount of \$2,045,761.

(6) Retirement/Pension Plan

Plan Information:

All employees, working more than 20 hours per week during the year, participate in the South Dakota Retirement System (SDRS), a cost sharing, multiple employer defined benefit pension plan administered by SDRS to provide retirement benefits for employees of the State of South Dakota and its political subdivisions. The SDRS provides retirement, disability, and survivors' benefits. The right to receive retirement benefits vests after three years of credited service. Authority for establishing, administering and amending plan provisions are found in SDCL 3-12. The SDRS issues a publicly available financial report that includes financial statements and required supplementary information. That report may be obtained at <http://www.sdrs.sd.gov/publications/> or by writing to the SDRS, P.O. Box 1098, Pierre, SD 57501-1098 or by calling (605) 773-3731.

Benefits Provided:

SDRS has three different classes of employees, Class A, Class B public safety and Class B judicial. Class A retirement benefits are determined as 1.7 percent prior to 2008 and 1.55 percent thereafter of the employee's final 3-year average compensation times the employee's years of service. Employees with 3 years of service are eligible to retire at age 55. Class B public safety benefits are determined as 2.4 percent for service prior to 2008 and 2.0 percent thereafter of employee final average compensation. Class B judicial benefits are determined as 3.733 percent for service prior to 2008 and 3.333 percent thereafter of employee final average compensation. All Class B employees with 3 years of service are eligible to retire at age 45. Employees are eligible for service-related disability benefits regardless of length of service. Three years of service is required for nonservice-related disability eligibility. Disability benefits are determined in the same manner as retirement benefits but are payable immediately without an actuarial reduction. Death benefits are a percent of the employee's final average salary.

The annual increase in the amount of the SDRS benefits payable on each July 1st is indexed to the consumer price index (CPI) based on SDRS funded status:

- If the SDRS market value funded ratio is 100% or more – 3.1% COLA
- If the SDRS market value funded ratio is 80.0% to 99.9%, index with the CPI
 - 90.0% to 99.9% funded — 2.1% minimum and 2.8% maximum COLA
 - 80.0% to 90.0% funded — 2.1% minimum and 2.4% maximum COLA
- If the SDRS market value funded ratio is less than 80% -- 2.1% COLA

All benefits except those depending on the Member's Accumulated Contributions are annually increased by the Cost-of-Living Adjustment.

Contributions:

Per SDCL 3-12, contribution requirements of the active employees and the participating employers are established and may be amended by the SDRS Board. Covered employees are required by state statute to contribute the following percentages of their salary to the plan; Class A Members, 6.0% of salary; Class B Judicial Members, 9.0% of salary; and Class B Public Safety Members, 8.0% of salary. State statute also requires the employer to contribute an amount equal to the employee's contribution. State statute also requires the employer to make an additional contribution in the amount of 6.2 percent for any compensation exceeding the maximum taxable amount for social security for general employees only. The Authority's contributions to the SDRS for the fiscal years ended June 30, 2015, 2014, and 2013 was \$557,420, \$554,835, and \$548,269, respectively, equal to the required contributions each year.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

JUNE 30, 2015

(6) Retirement/Pension Plan (Continued)

Pension Liabilities (Assets), Pension Expense (Revenue), and Deferred Outflows of Resources and Deferred Inflows of Resources to Pensions:

At June 30, 2014, SDRS is 107% funded and accordingly has a net pension asset. The proportionate shares of the components of the net pension asset of South Dakota Retirement System, for the Authority as of June 30, 2014 are as follows:

Proportionate share of net position restricted for pension benefits	\$56,092,706
Less proportionate share of total pension liability	52,282,921

Proportionate share of net pension asset	\$ 3,809,785
	=====

At June 30 2015, the Authority reported an asset of \$3,809,785 for its proportionate share of the net pension asset. The net pension asset was measured as of June 30, 2014 and the total pension asset used to calculate the net pension asset was based on a projection of the Authority's share of contributions to the pension plan relative to the contributions of all participating entities. At June 30, 2014, the Authority's proportion was .5287996%.

For the year ended June 30, 2015, the Authority's recognized pension expense (revenue) of (\$106,924). At June 30, 2015 the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Difference between expected and actual experience.	\$ 322,359	\$
Changes in assumption.	2,486,914	
Net Difference between projected and actual earnings on pension plan investments.		4,412,373
Authority contributions subsequent to the measurement date.	557,420	
	-----	-----
TOTAL	\$ 3,366,693	\$ 4,412,373
	=====	=====

\$557,420 reported as deferred outflow of resources related to pensions resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ending June 30, 2016. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension (revenue) as follows:

Year Ended June 30:

2016	\$ 302,730
2017	302,730
2018	302,730
2019	694,910

TOTAL	\$ 1,603,100
	=====

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

JUNE 30, 2015

(6) Retirement/Pension Plan (Continued)

Actuarial Assumptions:

The total pension asset in the June 30, 2014 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.25 %
Salary Increases	5.83 % at entry to 3.87 % after 30 years of service
Investment Rate of Return	7.25 % through 2016; 7.50 % thereafter, net of pension plan investment expense

Mortality rates were based on the RP-2000 Employee Mortality Table for males and females, as appropriate.

The actuarial assumptions used in the June 30, 2014 valuation were based on the results of an actuarial experience study for the period July 1, 2005 through June 30, 2010. The mortality assumptions were revised based on an extension of the experience study including mortality experience through June 30, 2013.

Investment portfolio management is the statutory responsibility of the South Dakota Investment Council (SDIC), which may utilize the services of external money managers for management of a portion of the portfolio. SDIC is governed by the Prudent Man Rule (i.e., the council should use the same degree of care as a prudent man). Current SDIC investment policies dictate limits on the percentage of assets invested in various types of vehicles (equities, fixed income securities, real estate, cash, private equity, etc.). The long-term expected rate of return on pension plan investments was determined using a method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2014 (see the discussion of the pension plan's investment policy) are summarized in the following table using geometric means:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
Global Equity	64.0%	4.7%
Fixed Income	26.0%	1.8%
Real Estate	8.0%	5.5%
Cash	2.0%	0.8%
Total	100%	

Discount Rate:

The discount rate used to measure the total pension asset was 7.25 percent through 2016 and 7.50% thereafter. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate and that matching employer contributions will be made at rates equal to the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension asset.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

JUNE 30, 2015

(6) Retirement/Pension Plan (Concluded)

Sensitivity of (liability) to changes in the discount rate:

The following presents the Authority's proportionate share of net pension asset calculated using the discount rate of 7.25 percent through 2016 and 7.50 percent thereafter, as well as what the Authority's proportionate share of the net pension asset would be if it were calculated using a discount rate that is 1-percentage point lower (6.25/6.50%) or 1-percentage point higher (8.25/8.50%) than the current rate:

	<u>1% Decrease</u>	<u>Current Discount Rate</u>	<u>1% Increase</u>
Authority's proportionate share of the net pension (liability) asset	\$(3,764,784)	\$3,809,785	\$9,987,636

Pension Plan Fiduciary Net Position:

Detailed information about the plan's fiduciary net position is available in the separately issued SDRS financial report.

(7) Risk Management

The Authority is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. There were no insurance claims exceeding insurance coverage during the past three years. During the period ended June 30, 2015, the Authority managed its risks as follows:

Building Structure Charges:

The buildings and permanent structures owned by the Authority are not covered by commercial insurance.

Personal Property Insurance:

The Authority purchases insurance for the contents of the administration building from a commercial insurance carrier, however, the contents of the Authority's other buildings are not insured.

Employee Health Insurance:

The Authority purchases health insurance for its employees from a commercial insurance carrier. Settled claims resulting from these risks have not exceeded the liability coverage during the past three years.

Liability Insurance:

The Authority purchases liability insurance for risks related to torts; theft or damage of property; and errors and omissions of public officials from a commercial insurance carrier. Settled claims resulting from these risks have not exceeded the liability coverage during the past three years.

Worker's Compensation:

At the policy renewal date of 06/01/15 the Authority continues to purchase workmen's compensation through the South Dakota Worker's Compensation Insurance Plan. Settled claims resulting from these risks have not exceeded the liability coverage during the past three years.

Unemployment Benefits:

The Authority provides coverage for unemployment benefits by paying into the Unemployment Compensation Fund established by state law and managed by the State of South Dakota.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

JUNE 30, 2015

(8) Significant Commitments, Contracts, and Subsequent Events

On December 23, 2009, the Authority received \$20,000,000 designated as Sanford Gift No.2. Gift No.2 was originally established for the Sanford Center for Science Education. Two amendments to the Homestake Gift Agreement were signed in June 2010 and October 2011, respectively, whereby it was agreed to use \$15 million of this \$20 million for the purpose of infrastructure and safety upgrades at the Underground Davis Campus and for replacing steel and other rehabilitation of the Ross Shaft. In early August, 2012, the Authority signed a third amendment to the Gift Agreement and received the remaining \$15 million of Gift No.2 called for by Section 2 of the Gift Agreement. The Gift No.2 balance of \$20 million was to be held in a restricted fund whereby the principal was not to be expended until a written approval of a business and operational plan for the Sanford Center for Science Education was received from Mr. Sanford. Furthermore, the third amendment allows the Authority to utilize and expend interest and other earnings on Gift No.2 restricted funds. In May, 2013, the Authority signed a fourth amendment to the Gift Agreement whereby it was agreed to expend up to \$7,000,000 of Gift No.2 for the construction or remodeling of the Yates Dry Building (located at SURF), the remodeling or replacement of the Lead Homestake Visitor's Center and the remodeling of Jonas Hall (located on the campus of Black Hills State University in Spearfish, SD). This authorization was conditioned on the Authority raising \$1.5 million from other sources for the Black Hills State University project and \$1 million for the Sanford Lab Visitor's Center in Lead. The Authority secured a \$2 million Future Fund grant from the State of South Dakota in October 2013 and an additional \$500,000 was received in July 2014 from Great Plains Education Foundation that satisfies this monetary obligation. Both outside facilities have agreed in writing to incorporate and use the name "Sanford" in the naming of the facilities. Operating agreements are in place which reasonably provide for the ongoing operations of the respective facilities by the Lead Chamber of Commerce and Black Hills State University. MOU's (Memorandum of Understanding) agreements have been signed with the applicable institutions that provide for the name "Sanford" to be used and operating agreements as stipulated in the fourth amendment. Given the construction budget of the (SLVC), the Jonas Science Building renovation costs, and the anticipated cost of the Yates Dry Building, it was not possible to undertake the upgrades to the Yates Dry with current funding. These details were reported in the Fifth Amendment to the Homestake Gift Agreement in February 2015. Furthermore, any part of Gift No.2 not used for the three construction projects may be used for the construction and operation of additional underground laboratory space at SURF to accommodate other experiments, and for related infrastructure to access or support the new laboratory space through the shafts.

In February 2010, the Authority entered into a contract with AmWest, Inc. – Hydro Resources in the amount of \$1,540,000 for the installation and maintenance of a deep level pump system. Subsequent change orders increased the contract amount to \$1,782,500 and extended the date through December 31, 2011. Another change order signed in May 2012 increased the contract amount to \$4,482,500 with a period of performance through December 31, 2017. The leased pump system is designed to dewater the mine from approximately the 5000' level to approximately the 7800' level. With the current vision of the DOE to not develop science laboratories past the 4850' level, the scope of this contract has been revised. Further negotiations with AmWest, Inc. resulted in the signing of another addendum to the contract effective January 1, 2013. This addendum reduced the monthly lease charges by \$2,500 per month for the years of 2013 through 2017, resulting in an overall savings of \$150,000. Additionally, the agreement calls for the leased property to become the property of the lessee on January 1, 2018 without any additional payment. It will then become the property of the Federal Government as these capital asset-type costs are being charged direct to the subcontract with LBNL.

In November 2013, the Authority entered into a contract with Ainsworth-Benning Construction Company in the amount of \$3,387,284 for the construction of the Sanford Lab Visitor Center to replace the Lead Homestake Visitor Center. Subsequent change orders increased the contract amount to \$3,634,063. Construction began in July 2014 and was substantially completed by the grand opening date of June 30, 2015. Additional contracts were signed with C & G Partners, Situ Fabrication, and Formations Inc. amounting to \$733,977 for exhibit design and fabrication. Included was a sculptural model of the SURF landscape and underground tunnel network. Final invoicing and total completion of the project will occur in fiscal year 2016. Ownership will then be transferred to the Lead Chamber of Commerce.

A contract was signed in early January 2014 with the South Dakota School of Mines and Technology (SDSM&T) to be the lead institution for the accelerator project known as (CASPAR) Compact Acceleration System Performing Astrophysical Research. With an additional change order the contract total is \$999,334 and extends into fiscal year 2016. This project will be located in the new underground laboratory at the 4850' Level near the Ross Shaft. Another underground facility is also nearing completion in close proximity to this laboratory for Black Hills State University

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

JUNE 30, 2015

(8) Significant Commitments, Contracts, and Subsequent Events (Continued)

to support low background counting activities, biology study workstations, and other future small scale experiments. A contract with Dean Kurtz Construction was entered into in January 2014 for \$2,668,062 for the design and outfitting of both facilities. With additional change orders, the contract amount has been increased to \$2,746,300. Construction was substantially completed in September 2015 allowing experimenters to move into the facilities.

The Authority's long term cooperative agreement with Homestake Mining Company of California continues. The Authority agrees to combine Homestake's wastewater from Grizzly Gulch with the mine wastewater, as well as treat, and discharge the water. For the first year of this agreement, Homestake agreed to pay the Authority an amount ranging from \$.58 to \$.84 per 1000 gallons based on an average total gallons treated per minute per month. Revenue from this agreement for the past two years was \$206,036 and \$195,877 respectively. Revenue was slightly higher this last year due to the number of gallons treated being slightly higher. This negotiated treatment price will be renegotiated once per year for the length of the contract. The negotiated price was renewed for the current year. Estimated revenues for the upcoming year are at \$218,000; somewhat higher than last year's actual due to increasing Homestake water to be treated. The term of the contract runs to September 30, 2020.

A draft lease between the Authority and DOE for land (above ground) and space (underground) for the Long Baseline Neutrino Facility (LBNF) has been developed and concurred on by the DOE-Chicago Real Estate Committee. It has been reviewed by the Authority's legal counsel and sent to Homestake/Barrick for their review per our property donation agreement. The term of the lease goes through June 30, 2035, but shall remain in force thereafter from year to year without further notice, but shall in no event extend beyond June 30, 2100.

The Authority, along with the South Dakota Bureau of Administration, and five additional South Dakota Authorities signed a Joint Powers Agreement on June 1, 2015 to form a captive insurance company to insure against certain risks. \$2,500,000 was repurposed in August 2015 from a portion of the \$10,000,000 Indemnification Fund held by the Authority. The original Appropriation Act for the indemnification fund that was made by the State Legislature in 2004 was included as a part of the agreement between Homestake Mining Company and the Authority. Homestake Mining Company has agreed with the signing of the Third Amendment to the Property Donation Agreement in August 2015 to release \$2,500,000 from the Indemnification Fund in order for the Authority to fund the captive insurance company. The Act from 2004 was revised by the State Legislature per Legislative Session 2015 HB 1186, to allow the use of up to \$2,500,000 to be used to provide initial capital and pay expenses for the Authority's purposes in the captive insurance company.

Letter Agreement #1586 was signed in August 2015 between the Governor's Office of Economic Development (GOED) and the Authority whereby the State is granting up to \$6,000,000 between July 14, 2015 and September 30, 2018. The State has chosen to engage in a public-private partnership with the Authority, the South Dakota Community Foundation, and other private foundations, to assist with the costs of infrastructure/laboratory upgrades, procurement of xenon for future "Dark Matter" experiments, and interest payments to private investors. The first \$2,000,000 was received from the State in September 2015. A loan agreement is in place between the Authority and South Dakota Community Foundation to secure \$2,000,000 to be used for the purchase of xenon for the future LZ experiment. This loan is an eleven year unsecured nonrecourse loan with 2.5% simple interest to be paid quarterly to the lender. The loan will be repaid at the end of the LZ experiment (approximately October 2026) from the sale proceeds of the xenon previously purchased.

(9) Construction Work in Process

The Authority accumulates the costs of construction projects in Construction Work in Progress until such time as the projects are completed and/or placed in service. Some of the ongoing improvement projects are capitalized as they progress. The \$24,336,743 of construction work in progress at June 30, 2015, consisted of \$15,087,491 of accumulated costs for the Ross Shaft rehabilitation project, \$4,460,206 for the Sanford Visitor Center, \$3,393,207 for the (CASPAR) experiment and (CASPAR)-(BHSU) facility development, \$1,383,791 for the Jonas Science Center renovations, and \$12,048 for a work deck. The costs accumulated consist of amounts under contract in addition to materials and other expenses purchased by the Authority. The remaining commitment on existing contracts at June 30, 2015 is approximately \$4,489,282. These commitments are to be paid for using current accumulated funds that have been redirected from the Sanford Gift #2, the State Legislative Appropriation balance left of the \$3.95 million received in March 2015, as well as private fund raising activities.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

JUNE 30, 2015

(10) Continuing Operations

The DOE's 2016 budget includes approximately \$14 million to fund basic operations at the Sanford Lab. Modification No. 33 to Subcontract No. 6994297 was signed on September 21, 2015 with LBNL extending the period of performance to November 30, 2015. The current 2016 budget is being reviewed by LBNL procurement and DOE headquarters for approval. An additional request to this contract for \$4,257,960 for the Ross Shaft refurbishment project is also at DOE headquarters for consideration. This will fund the project for approximately nine months. Another small subcontract with LBNL is still in place to fund Authority support for LUX (Large Underground Xenon) experiment. Modification No. 13 extended the period of performance through December 30, 2015. Modification No. 14 added additional funding of \$109,549 for the project. Additionally, Authority support for the LUX/Zepplin experiment design has been extended to December 31, 2015. Further support for designs for underground and surface needs for the LBNF (Long Baseline Neutrino Facility) are in place with subcontracts through FNAL (Fermi National Accelerator Laboratory). The preferred site for the detector per the scientific community is underground. In October 2014 after the visit to SURF by the international group of collaborators the Sanford Lab was named to remain the host for the (LBNF) related detectors. After further meetings, the collaboration officially transferred all responsibilities to a new collaboration referred to as the Long Baseline Neutrino Facility (LBNF) consisting of United States and International support. LBNF construction could start as early as the middle of 2017 with the experiment running through approximately 2040.

On May 8, 2013, the research project labeled DIANA (Dual Ion Accelerators for Nuclear Astrophysics) informed the Authority that they selected the Sanford Laboratory to host the experiment. The NSF (National Science Foundation) funded the design development through Notre Dame University. The construction phase of this experiment was not funded by the NSF. Instead, a smaller scale project labeled CASPAR is currently mobilizing in the Ross Campus on the 4850-foot level underground. The Authority pledged initial support of \$999,334 towards experiment development. The facility also includes a laboratory for BHSU (Black Hills State University) which is also nearing completion. Chilled water and power distribution will be shared by both groups to reduce costs.

(11) Related Party Transactions

Mr. Ron Wheeler was appointed to the Board of Directors by the Governor effective July 1, 2013, and is a current member of the Board of Directors. As of July 1, 2013, Ron Wheeler transitioned from Executive Director to the Director of Governmental & External Affairs for the Authority. Mr. Wheeler was a full-time employee of the Authority until January 3, 2014, at which time he retired from full-time employment. Effective January 3, 2014, the Authority signed a contract with Mr. Wheeler as a consultant for the Authority. The contract is for \$275,000 and extends to January 3, 2017. For the period of July 1, 2014 – June 30, 2015, he was paid \$102,775.50 for his consulting services. Mr. Wheeler will assist in directing the state and federal government affairs programs for the Authority. Additionally he will maintain and foster private funding sources for the long-term growth of the facility.

REQUIRED SUPPLEMENTARY INFORMATION OTHER THAN MD&A

**SCHEDULE OF PROPORTIONATE SHARE OF THE
NET PENSION LIABILITY (ASSET)**

South Dakota Retirement System

Last 10 Fiscal Years *

	<u>2014</u>
Authority's proportion of the net pension liability (asset)	0.5287996%
Authority's proportionate share of net pension liability (asset)	\$ (3,809,788)
Authority's covered employer payroll	\$ 8,888,749
Authority's proportionate share of the net pension liability (asset) as a percentage of its covered-employee payroll	42.86%
Plan fiduciary net position as a percentage of the total pension liability (asset)	107%

* The amounts presented for each fiscal year were determined as of 06/30

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, governments should present information for those years for which information is available.

SCHEDULE OF EMPLOYER CONTRIBUTIONS

South Dakota Retirement System

Last 10 Fiscal Years

	<u>2015</u>
Contractually required contribution	\$ 557,420
Contributions in relation to the contractually required contribution	<u>\$ 557,420</u>
Contribution deficiency (excess)	<u>\$ -</u>
Authority's covered-employee payroll	\$ 9,042,866
Contributions as a percentage of covered-employee payroll	6.16%

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, governments should present information for those years for which information is available.

SUPPLEMENTARY INFORMATION

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

**SCHEDULE OF OPERATING EXPENSES
FOR THE YEAR ENDED JUNE 30, 2015**

Personal Services	
Employee Salaries	\$ 6,471,384
Employee Benefits	2,244,670
Total Personal Services	8,716,054
Travel	
Meals and Lodging	39,492
Auto and Fleet Services	41,064
Air - Commercial and Charter	37,762
Incidentals to Travel	2,648
Non-Employee Travel	43,311
Meals (Not Overnight)	253
Total Travel	164,530
Contractual Services	
Equipment Rental	93,643
Contractual - Other	5,288,241
Insurance	404,288
Lobbying	214,000
Computer Services	228,823
Telecommunications	48,428
Monitoring and Programming	85,668
Legal Consultant	41,728
Training	22,585
Consultant Fees - Accounting and Auditing	11,455
Promotion and Advancement	9,722
Dues and Memberships	4,049
Utilities	2,049,126
Maintenance and Repairs	472,079
Total Contractual Services	8,973,835
Supplies, Materials and Other Operating Expenses	
Maintenance and Repairs	440,918
Other Supplies and Equipment	752,837
Other Expenses	3,602
Office Supplies and Equipment	24,145
Safety	2,346
Licenses and Permits	36,999
Workshop and Registration Fees	23,948
Postage	3,375
Bank Charges	544
Total Supplies, Materials and Other Operating Expenses	1,288,714
Amortization Expense	114,371
Depreciation Expense	1,742,887
Total Operating Expenses	\$21,000,391

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2015**

	Pass-Through Numbers	CFDA Numbers	Amount
<i>U.S. Department of Energy</i>			
Pass-Through the Regents of the University of California LUX (Large Underground Xenon) Research & Development	6973786	81.6973786	\$ 178,460
<i>U.S. Department of Energy</i>			
Pass-Through the Regents of the University of California SURF (Sanford Underground Research Facility) Operations Support	6994297	81.6994297	13,967,413
<i>U.S. Department of Energy</i>			
Pass-Through the Regents of the University of California LUX/Zeplin (LZ) Experiment Design Engineering Support	7093667	81.7093667	200,050
<i>U.S. Department of Energy</i>			
Pass-Through Fermi National Accelerator Laboratory LBNF(Long Baseline Neutrino Facility) NEPA Environment	609755	81.609755	96,166
<i>U.S. Department of Energy</i>			
Pass-Through Fermi National Accelerator Laboratory LBNF (Long Baseline Neutrino Facility) Environmental Analysis	610998	81.610998	21,820
<i>U.S. Department of Energy</i>			
Pass-Through Fermi National Accelerator Laboratory LBNF (Long Baseline Neutrino Facility) Engineering Support	613525	81.613525	205,364
<i>U.S. Department of Energy</i>			
Pass-Through Fermi National Accelerator Laboratory LBNF (Long Baseline Neutrino Facility) Rail-veyor Design	614808	81.614808	17,146
<i>U.S. Department of Energy</i>			
Pass-Through Fermi National Accelerator Laboratory LBNF (Long Baseline Neutrino Facility) Geotechnical Exploration	614807	81.614807	677,850
<i>U.S. Department of Energy</i>			
Pass-Through Fermi National Accelerator Laboratory LBNF (Long Baseline Neutrino Facility) International Engineer. Supp.	618743	81.618743	54,875
<i>U.S. Department of Energy</i>			
Pass-Through Fermi National Accelerator Laboratory LBNF (Long Baseline Neutrino Facility) Engineering Support	618228	81.618228	234,192
<i>U.S. Department of Energy</i>			
Pass-Through Fermi National Accelerator Laboratory LBNF (Long Baseline Neutrino Facility) Excavation Prelim. Design	618741	81.618741	941,847

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2015**

	Pass-Through Numbers	CFDA Numbers	Amount
<i>U.S. Department of Energy</i>			
Pass-Through Fermi National Accelerator Laboratory			
LBNF (Long Baseline Neutrino Facility) Building/Site Infrastructure	620223	81.620223	844,457
<i>U.S. Department of Energy</i>			
Pass-Through University of North Carolina at Chapel Hill			
Conceptual Design for Majorana Demonstrator	5044819	81.5044819	31,998
<i>National Science Foundation:</i>			
Pass-Through Case Western Reserve University			
Mathematical and Physical Sciences	5000228814	47.049	1,194
<i>National Science Foundation:</i>			
Pass-Through Regents of the University of Minnesota			
Mathematical and Physical Sciences	A003778902	47.049	28,682
Total			\$17,501,514

Note: The schedule of expenditures of federal awards is presented on the cash basis of accounting.

Financial Report – Mr. Mike Headley

Financial Report

- 6A. Financial Statements—attached is the SDSTA Financial Summary as of May 31, 2016. (This is a duplicate of the summary found under Agenda Item #7A SDSTA May Monthly Report in the e-Board Packet.)
- 6B. FY2017 Budget—attached for approval.
- 6C. Update on Internal Controls—informational.
- 6D. Discuss May, Adam, Gerdes & Thompson Hourly Rate Increase—letter attached for approval.

Recommended Action:

- 6A. Motion to accept the Financial Report as presented.*
- 6B. Motion to approve FY2017 budget as presented.*
- 6C. Informational.*
- 6D. Motion to approve hourly rate increase as presented.*

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DIVISION: ALL

BALANCE SHEET

ASSETS

AS OF
05/31/16

CURRENT ASSETS

First Interstate Checking	\$	463,986.27
First Interstate Other		27,632.89

Total in Local Checking		491,619.16
SD Treas: Indemnification		7,500,000.00
SD Treas: Mine Closure		1,379,921.18
SD Treas: Operating		168,270.49
SD Treas: Sanford		111,945.35
SD Treas: Sanford Gift #2		2,103,659.97
SD Treas: Experiments		2,357,275.00

Total with SD Treasurer		13,621,071.99
Billed A/R		3,396,162.87
Unbilled A/R		(3,204.48)
Other A/R		148,972.54
Inventory - Supplies		2,473,622.74
Inventory - Warehouse		368,921.81
Other Current Assets		515,923.90

Total Current Assets		21,013,090.53

FIXED ASSETS

Land, Underground & Other	12,398,635.03
Bldgs & Infrastructure	8,881,327.62
Improvements	64,557,726.85
Computer Equipment	455,888.25
Equipment & Fixtures	10,187,773.06
Accum Depr & Amort	(10,800,242.04)

Total Fixed Assets	85,681,108.77

OTHER ASSETS

Work in Process	5,519,877.65
Equipment - Capital Lease	359,206.46
Pension Deferred Outflows	7,176,478.00
Investment Captive Ins.	2,500,000.00

Total Other Assets	15,555,562.11

TOTAL ASSETS

=====

\$ 122,249,761.41

=====

DIVISION: ALL

BALANCE SHEET

LIABILITIES & EQUITY

AS OF
05/31/16

CURRENT LIABILITIES

Accounts Payable	\$	1,898,139.69
Other Payables		27,788.24

Total Accounts Payable		1,925,927.93
Accrued Payroll Liab		808,428.51

Total Current Liabilities		2,734,356.44

OTHER LIABILITIES

LT Accrued EB/Lease		359,206.46
LT Xenon Notes Payable		2,000,000.00
Pension Deferred Inflows		4,412,373.00

Total Other Liabilities		6,771,579.46

EQUITY

Restricted: Indemnificati		7,500,000.00
Restricted: Captive		2,500,000.00
Restricted: Sanford I.Lab		111,945.35
Restricted: Mine Closure		1,379,921.18
Restricted: Sanford Gift2		1,969,160.00
Restricted: Pension		2,764,105.00
Restricted: Experim. Int.		2,357,275.00

Total Restricted Funds		18,582,406.53
Investment in Gen FA		85,681,108.77
Unrestricted Funds		8,480,310.21

Total Equity		112,743,825.51

TOTAL LIABILITIES & EQUITY

=====

\$ 122,249,761.41

=====

ALL

STATEMENT OF INCOME

FOR THE PERIOD ENDING 05/31/16

	YR-TO-DATE
REVENUE	
DOE Subcontracts	\$ 21,481,307.40
NSF/NASA Subcontracts	6,743.13
State Revenue	2,018,700.45
Contributions & Donations	407,781.62
Checking Interest	143.23
Interest Income	103,940.32

TOTAL REVENUE	24,018,616.15
DIRECT COSTS	
Direct Labor	6,632,052.98
ERT Labor	30,458.79
Board of Directors	10,840.00
Capital Outlay >\$5K	135,340.65
Contractual Svcs	6,599,878.32
Inventory	265,545.34
Supplies	1,352,354.35
Travel - Domestic	82,116.65
Travel - Foreign	39,239.88
Utilities	2,043,191.72
Other Direct Costs	260,960.06
Unallow/Unbill Costs	315,401.58

TOTAL DIRECT COSTS	17,767,380.32
INDIRECT COSTS	
Fringe Benefits	3,460,084.20
Overhead	4,033,965.69

TOTAL INDIRECT COSTS	7,494,049.89

GROSS PROFIT FROM OPERATIONS	(1,242,814.06)

OTHER INCOME	
Water Treatment	222,314.62
Miscellaneous Income	65,025.72
Other Operating Income	3,256.65

TOTAL OTHER INCOME	290,596.99
OTHER EXPENSES	
Loss(Gain) on Sale of FA	155,509.06
Reclass Incr Net Assets	(1,449,965.71)

TOTAL OTHER EXPENSES	(1,294,456.65)
	=====
NET INCOME/LOSS ()	342,239.58
	=====

DIVISION: ALL

COMPARATIVE BALANCE SHEET

ASSETS

	AS OF 05/31/16	AS OF 05/31/16	\$ CHANGE	% CHANGE
CURRENT ASSETS				
First Interstate Checking	\$ 463,986.27	\$ 716,436.72	\$ (252,450.45)	-35.24%
First Interstate Other	27,632.89	57,888.45	(30,255.56)	-52.27%
	-----	-----	-----	-----
Total in Local Checking	491,619.16	774,325.17	(282,706.01)	-36.51%
SD Treas: Indemnification	7,500,000.00	10,000,000.00	(2,500,000.00)	-25.00%
SD Treas: Mine Closure	1,379,921.18	1,362,763.38	17,157.80	1.26%
SD Treas: Operating	168,270.49	648,578.00	(480,307.51)	-74.06%
SD Treas: Sanford	111,945.35	3,136,756.48	(3,024,811.13)	-96.43%
SD Treas: Sanford Gift #2	2,103,659.97	4,660,912.00	(2,557,252.03)	-54.87%
SD Treas: SB196 Transfer	-	3,950,000.00	(3,950,000.00)	-100.00%
SD Treas: Experiments	2,357,275.00	-	2,357,275.00	100.00%
	-----	-----	-----	-----
Total with SD Treasurer	13,621,071.99	23,759,009.86	(10,137,937.87)	-42.67%
Billed A/R	3,396,162.87	2,760,154.97	636,007.90	23.04%
Unbilled A/R	(3,204.48)	(5.79)	(3,198.69)	55245.00%
Other A/R	148,972.54	382,918.71	(233,946.17)	-61.10%
Inventory - Supplies	2,473,622.74	2,551,692.22	(78,069.48)	-3.06%
Inventory - Warehouse	368,921.81	369,788.53	(866.72)	-0.23%
Other Current Assets	515,923.90	185,218.46	330,705.44	178.55%
	-----	-----	-----	-----
Total Current Assets	21,013,090.53	30,783,102.13	(9,770,011.60)	-31.74%
FIXED ASSETS				
Land, Underground & Other	12,398,635.03	12,353,375.03	45,260.00	0.37%
Bldgs & Infrastructure	8,881,327.62	8,881,327.62	-	0.00%
Improvements	64,557,726.85	49,274,276.00	15,283,450.85	31.02%
Computer Equipment	455,888.25	362,464.95	93,423.30	25.77%
Equipment & Fixtures	10,187,773.06	9,468,941.64	718,831.42	7.59%
Accum Depr & Amort	(10,800,242.04)	(8,842,572.65)	(1,957,669.39)	22.14%
	-----	-----	-----	-----
Total Fixed Assets	85,681,108.77	71,497,812.59	14,183,296.18	19.84%
OTHER ASSETS				
Work in Process	5,519,877.65	9,511,731.54	(3,991,853.89)	-41.97%
Equipment - Capital Lease	359,206.46	535,984.64	(176,778.18)	-32.98%
Pension Deferred Outflows	7,176,478.00	-	7,176,478.00	100.00%
Investment Captive Insurance	2,500,000.00	-	2,500,000.00	100.00%
	-----	-----	-----	-----
Total Other Assets	15,555,562.11	10,047,716.18	5,507,845.93	54.82%
	=====	=====	=====	=====
TOTAL ASSETS	\$ 122,249,761.41	\$ 112,328,630.90	\$ 9,921,130.51	8.83%
	=====	=====	=====	=====

DIVISION: ALL

COMPARATIVE BALANCE SHEET

LIABILITIES & EQUITY

	AS OF 05/31/16	AS OF 05/31/16	\$ CHANGE	% CHANGE
<hr/>				
CURRENT LIABILITIES				
Accounts Payable	\$ 1,898,139.69	\$ 2,783,788.99	\$ (885,649.30)	-31.81%
Other Payables	27,788.24	11,662.15	16,126.09	138.28%
	-----	-----	-----	-----
Total Accounts Payable	1,925,927.93	2,795,451.14	(869,523.21)	-31.10%
Accrued Payroll Liab	808,428.51	721,647.95	86,780.56	12.03%
	-----	-----	-----	-----
Total Current Liabilities	2,734,356.44	3,517,099.09	(782,742.65)	-22.26%
 OTHER LIABILITIES				
LT Accrued EB/Lease	359,206.46	535,984.64	(176,778.18)	-32.98%
LT Xenon Notes	2,000,000.00	-	2,000,000.00	100.00%
Pension Deferred Inflows	4,412,373.00	-	4,412,373.00	100.00%
	-----	-----	-----	-----
Total Other Liabilities	6,771,579.46	535,984.64	6,235,594.82	1163.39%
	-----	-----	-----	-----
TOTAL LIABILITIES	9,505,935.90	4,053,083.73	5,452,852.17	134.54%
 EQUITY				
Restricted: Indemnificati	7,500,000.00	10,000,000.00	(2,500,000.00)	-25.00%
Restricted: Captive	2,500,000.00	-	2,500,000.00	100.00%
Restricted: Sanford I.Lab	111,945.35	7,086,756.48	(6,974,811.13)	-98.42%
Restricted: Mine Closure	1,379,921.18	1,362,763.38	17,157.80	1.26%
Restricted: Sanford Gift2	1,969,160.00	4,660,912.00	(2,691,752.00)	-57.75%
Restricted: Pension	2,764,105.00	-	2,764,105.00	100.00%
Restricted: Experim. Int.	2,357,275.00	-	2,357,275.00	100.00%
	-----	-----	-----	-----
Total Restricted Funds	18,582,406.53	23,110,431.86	(4,528,025.33)	-19.59%
Investment in Gen FA	85,681,108.77	71,497,812.59	14,183,296.18	19.84%
Unrestricted Funds	8,480,310.21	13,667,302.72	(5,186,992.51)	-37.95%
	-----	-----	-----	-----
TOTAL EQUITY	112,743,825.51	108,275,547.17	4,468,278.34	4.13%
 TOTAL LIABILITIES & EQUITY				
	=====	=====	=====	=====
	\$ 122,249,761.41	\$ 112,328,630.90	\$ 9,921,130.51	8.83%
	=====	=====	=====	=====

COMPARATIVE STATEMENT OF INCOME

FOR THE PERIOD ENDING 05/31/16

	YEAR TO DATE	PRIOR YEAR TO DATE	\$ CHANGE	% CHANGE
REVENUE				
DOE Subcontracts	\$ 21,481,307.40	\$ 16,142,363.59	\$ 5,338,943.81	33.07%
NSF Subcontracts	6,743.13	25,156.88	(18,413.75)	-73.20%
State Revenue	2,018,700.45	6,445,047.99	(4,426,347.54)	-68.68%
Contributions & Donations	407,781.62	595,000.00	(187,218.38)	-31.47%
Checking Interest	143.23	75.60	67.63	89.46%
Interest Income	103,940.32	175,768.73	(71,828.41)	-40.87%
TOTAL REVENUE	24,018,616.15	23,383,412.79	635,203.36	2.72%
DIRECT COSTS				
Direct Labor	6,632,052.98	6,640,436.05	(8,383.07)	-0.13%
ERT Labor	30,458.79	34,316.94	(3,858.15)	-11.24%
Board of Directors	10,840.00	11,451.39	(611.39)	-5.34%
Capital Outlay >\$5K	135,340.65	31,289.00	104,051.65	332.55%
Contractual Svcs	6,599,878.32	4,218,379.97	2,381,498.35	56.46%
Emergency Resp	-	2,346.49	(2,346.49)	-100.00%
Inventory	265,545.34	336,779.91	(71,234.57)	-21.15%
Supplies	1,352,354.35	634,682.49	717,671.86	113.08%
Travel - Domestic	82,116.65	73,386.66	8,729.99	11.90%
Travel - Foreign	39,239.88	24,216.81	15,023.07	62.04%
Utilities	2,043,191.72	1,839,723.54	203,468.18	11.06%
Other Direct Costs	260,960.06	184,336.89	76,623.17	41.57%
Unallow/Unbill Costs	315,401.58	369,722.04	(54,320.46)	-14.69%
TOTAL DIRECT COSTS	17,767,380.32	14,401,068.18	3,366,312.14	23.38%
INDIRECT COSTS				
Fringe Benefits	3,460,084.20	3,092,182.59	367,901.61	11.90%
Overhead	4,033,965.69	3,472,786.36	561,179.33	16.16%
TOTAL INDIRECT COSTS	7,494,049.89	6,564,968.95	929,080.94	14.15%
GROSS PROFIT	(1,242,814.06)	2,417,375.66	(3,660,189.72)	-151.41%
OTHER INCOME				
Water Treatment	222,314.62	171,628.18	50,686.44	29.53%
Miscellaneous Income	65,025.72	83,152.70	(18,126.98)	-21.80%
Other Operating Income	3,256.65	965.00	2,291.65	237.48%
TOTAL OTHER INCOME	290,596.99	255,745.88	34,851.11	13.63%
OTHER EXPENSES				
Loss(Gain) on Sale of FA	155,509.06	2,382.14	153,126.92	6428.12%
Reclass Incr Net Assets	(1,449,965.71)	(1,297,440.86)	(152,524.85)	11.76%
TOTAL OTHER EXPENSES	(1,294,456.65)	(1,295,058.72)	602.07	-0.05%
NET INCOME/LOSS ()	\$ 342,239.58	\$ 3,968,180.26	\$ (3,625,940.68)	-91.38%

South Dakota Science & Technology Authority
Available Cash
5/31/2016

Cash Total Checking/Savings	\$ 491,619
Cash With State Treasurer	<u>\$ 13,621,072</u>
Total Cash	\$ 14,112,691
Less: Restricted Funds	
Indemnification/Mine Closure	\$ (8,879,921)
Experiments (Xenon, Interest, Infrastructure)	<u>\$ (2,357,275)</u>
Total Cash Available for Infrastructure Upgrades and Operations	\$ 2,875,495
Less: Total Liabilities w/out Xenon Notes Payable & Pension	<u>\$ (1,289,481)</u>
Available Cash	<u><u>\$ 1,586,014</u></u>

SDSTA Operating Budget Summary FY2016

Actual vs Budget

May 2016 & YTD

	\$ Over/Under				\$ Over/Under				
	May 2016	Budget	Budget	% of Budget	Actual YTD	YTD Budget	Budget	% of Budget	% Remaining
									100%
SDSTA (Authority) Direct Charges									
Board of Directors	\$18,240.00	\$19,850.00	\$1,610.00	91.89%	\$211,875.00	\$217,351.00	\$5,476.00	97.48%	2.52%
Executive Office	\$11,937.00	\$15,915.00	\$3,978.00	75.01%	\$163,620.00	\$181,555.00	\$17,935.00	90.12%	9.88%
Science Center E & O	\$4,116.00	\$4,500.00	\$384.00	91.47%	\$30,144.00	\$30,249.00	\$105.00	99.65%	0.35%
Science Liaison	-\$700.00	\$373.00	\$1,073.00	-187.67%	-\$508.00	\$4,103.00	\$4,611.00	0.00%	100.00%
Sanf.L.Visitor C. (Director)	\$6,423.00	\$6,550.00	\$127.00	98.06%	\$68,075.00	\$70,196.00	\$2,121.00	96.98%	3.02%
Subtotal	\$40,016.00	\$47,188.00	\$7,172.00	84.8%	\$473,206.00	\$503,454.00	\$30,248.00	93.99%	6.01%
Federal/State Funding - Direct Charges									
Fermi P.O.#618228 Staff Services	\$0.00	\$0.00	\$0.00	0.0%	\$298,415.00	\$230,062.00	-\$68,353.00	129.71%	-29.71%
Fermi P.O.#618741 Excav.Des.	\$0.00	\$0.00	\$0.00	0.0%	\$1,413,736.00	\$1,416,157.00	\$2,421.00	99.83%	0.17%
Fermi P.O.#620223 Building/Infra.	\$20,695.00	\$0.00	-\$20,695.00	100.0%	\$2,119,819.00	\$2,292,987.00	\$173,168.00	92.45%	7.55%
Fermi P.O.#622034 WasteRockSt.	\$0.00	\$0.00	\$0.00	0.0%	\$56,150.00	\$69,200.00	\$13,050.00	81.14%	18.86%
Fermi P.O.#623825 RiskWShop	\$0.00	\$0.00	\$0.00	0.0%	\$22,567.00	\$24,269.00	\$1,702.00	92.99%	7.01%
Fermi P.O.#624787 BlastStudy	\$0.00	\$0.00	\$0.00	0.0%	\$80,399.00	\$126,177.00	\$45,778.00	63.72%	36.28%
Fermi P.O.#624751 Director Review	\$0.00	\$0.00	\$0.00	0.0%	\$3,813.00	\$6,653.00	\$2,840.00	57.31%	42.69%
Fermi P.O.#625206 CD3Review	\$0.00	\$0.00	\$0.00	0.0%	\$5,022.00	\$7,650.00	\$2,628.00	65.65%	34.35%
Fermi P.O.#625500 F.SiteFacil.Servic	\$20,906.00	\$23,333.00	\$2,427.00	89.6%	\$111,547.00	\$112,922.00	\$1,375.00	98.78%	1.22%
Fermi P.O.#625501 Engin.Services	\$14,595.00	\$23,600.00	\$9,005.00	61.84%	\$90,734.00	\$96,158.00	\$5,424.00	94.36%	5.64%
Fermi P.O.#625691 B/Site Final Des.	\$116,968.00	\$200,000.00	\$83,032.00	58.48%	\$491,964.00	\$650,000.00	\$158,036.00	75.69%	24.31%
Fermi P.O.#625692 Pre Excav.F.D.	\$227,342.00	\$250,000.00	\$22,658.00	90.94%	\$655,404.00	\$750,000.00	\$94,596.00	87.39%	12.61%
Fermi P.O.#627228GlobalSurSupp.	\$115.00	\$2,104.00	\$1,989.00	5.47%	\$115.00	\$2,104.00	\$1,989.00	5.47%	94.53%
Fermi P.O.#627356GlobalSurvey	\$36,854.00	\$40,000.00	\$3,146.00	92.14%	\$36,854.00	\$40,000.00	\$3,146.00	92.14%	7.87%
LBNL LUX C#6973786	\$12,101.00	\$9,742.00	-\$2,359.00	124.22%	\$111,853.00	\$108,868.00	-\$2,985.00	102.74%	-2.74%
LBNL Operations C#6994297	\$1,326,445.00	\$1,359,225.00	\$32,780.00	97.59%	\$10,689,418.00	\$10,810,003.00	\$120,585.00	98.88%	1.12%
LBNL LUX/Zeplin C#7093667	\$0.00	\$0.00	\$0.00	0.0%	\$50,721.00	\$58,992.00	\$8,271.00	85.98%	14.02%
LBNL LUX/Zeplin C#7255146	\$20,464.00	\$20,751.00	\$287.00	98.62%	\$166,033.00	\$214,836.00	\$48,803.00	77.28%	22.72%
LBNL Ross Rehab C#7262800	\$263,203.00	\$432,002.00	\$168,799.00	60.93%	\$1,724,752.00	\$2,281,464.00	\$556,712.00	75.60%	24.40%
LBNL kISMET Task#7289931	\$4,487.00	\$20,460.00	\$15,973.00	21.93%	\$4,487.00	\$20,460.00	\$15,973.00	21.93%	78.07%
MJD (Majorana) # 5-4473	\$0.00	\$0.00	\$0.00	0.0%	\$9,130.00	\$12,000.00	\$2,870.00	76.08%	23.92%
MJD (Majorana) ORNL144149	\$2,328.00	\$2,000.00	-\$328.00	116.4%	\$13,957.00	\$12,000.00	-\$1,957.00	116.31%	-16.31%
Northwestern Univ. NASA981568	\$4,487.00	\$13,750.00	\$9,263.00	32.63%	\$4,487.00	\$13,750.00	\$9,263.00	32.63%	67.37%
CUBED - USD	\$0.00	\$0.00	\$0.00	0.0%	\$739.00	\$1,000.00	\$261.00	73.90%	26.10%
BHSU-UGCampus Gen.Serv.	\$0.00	\$0.00	\$0.00	0.0%	\$61.00	\$400.00	\$339.00	15.25%	84.75%
Sanf.Sci.Ed.Center - GOED Funded	\$47,390.00	\$35,000.00	-\$12,390.00	135.4%	\$392,894.00	\$362,085.00	-\$30,809.00	108.51%	-8.51%
U. of Minn. DUGL#A003778902	\$0.00	\$0.00	\$0.00	0.0%	\$908.00	\$2,000.00	\$1,092.00	45.40%	54.60%
SDSM&Tech CASPAR Gen.Serv.	\$0.00	\$0.00	\$0.00	0.0%	\$1,232.00	\$6,400.00	\$5,168.00	19.25%	80.75%
* Xilinx, Inc. P.O.#732495	\$203.00	\$240.00	\$37.00	84.58%	\$2,598.00	\$4,600.00	\$2,002.00	56.48%	43.52%
Subtotal	\$2,118,583.00	\$2,432,207.00	\$313,624.00	87.11%	\$18,559,809.00	\$19,733,197.00	\$1,173,388.00	94.05%	5.95%
Indirect Expenses									
Indirect Charges Personnel	\$117,295.00	\$117,918.00	\$623.00	99.47%	\$1,248,208.00	\$1,251,968.00	\$3,760.00	99.70%	0.30%
Indirect Charges Other	\$565,058.00	\$364,279.00	-\$200,779.00	155.12%	\$3,171,126.00	\$2,855,881.00	-\$315,245.00	111.04%	-11.04%
Subtotal	\$682,353.00	\$482,197.00	-\$200,156.00	141.51%	\$4,419,334.00	\$4,107,849.00	-\$311,485.00	107.58%	-7.58%
Totals	\$2,840,952.00	\$2,961,592.00	\$120,640.00	95.93%	\$23,452,349.00	\$24,344,500.00	\$892,151.00	96.34%	3.66%

* Private Corporation (Commercial Group)

SDSTA CAPEX Budget Summary FY15/16
Actual vs Budget
May 2016 & YTD

<u>Budget Area</u>	<u>Actual Month</u>	<u>FY2016 Monthly Budget</u>	<u>\$ Over/Under Budget</u>	<u>% of Budget</u>	<u>Actual YTD</u>	<u>FY2016 YTD Budget</u>	<u>\$ Over/Under Budget</u>	<u>% of Budget</u>	<u>% Remaining</u>
									100.00%
Operational CAPEX	\$ 50,435.10	\$ 57,591.00	\$ 7,155.90	87.57%	\$ 6,932,896.81	\$ 9,431,845.26	\$ 2,498,948.45	73.51%	26.49%
TOTAL CAPEX	\$ 50,435.10	\$ 57,591.00	\$ 7,155.90	87.57%	\$ 6,932,896.81	\$ 9,431,845.26	\$ 2,498,948.45	73.51%	26.49%

SD Science & Technology Authority
Operational CAPEX Budget
Monthly Actual vs Budget

Project #	Project Description	May-16	Budget	\$ Over/UnderBudget	% of Budget
CAP2012-27	Ross Shaft Furnishings Repl.M&S	\$ -	\$ -	\$ -	0.00%
CAP2012-28	Work Decks	\$ -	\$ -	\$ -	0.00%
CAP2012-32	SDSTA Personnel	\$ 2,399.40	\$ 2,591.00	\$ 191.60	92.61%
CAP2014-01	Sanford Visitor Center Design & Construction	\$ 2,965.59	\$ -	\$ (2,965.59)	100.00%
CAP2014-05	CASPAR Experiment Development	\$ -	\$ -	\$ -	0.00%
CAP2014-06	BHSU Jonas Science Building Renovation	\$ -	\$ -	\$ -	0.00%
CAP2014-09	CASPAR Facility Development	\$ -	\$ -	\$ -	0.00%
CAP2014-11	BHSU Facility Development	\$ -	\$ -	\$ -	0.00%
CAP2016-01	Sanford Visitor Center Exhibit Davis Tribute	\$ -	\$ -	\$ -	0.00%
CAP2016-02	LZ Surface & Facility Upgrades	\$ 2,333.70	\$ 5,000.00	\$ 2,666.30	46.67%
CAP2016-03	LZ Xenon Gas	\$ 416.17	\$ -	\$ (416.17)	100.00%
CAP2016-04	Water Inflow Project - Pipe Fusing	\$ 42,320.24	\$ 50,000.00	\$ 7,679.76	18.15%
	Monthly Totals	\$ 50,435.10	\$ 57,591.00	\$ 7,155.90	87.57%

SD Science & Technology Authority
Operational CAPEX Budget
YTD FY2016 Actual vs Budget

Project #	Project Description	May 2016 YTD	FY2016 Budget	\$ Over/UnderBudget	% of Budget	% Remaining
						100%
CAP2012-27	Ross Shaft Furnishings Repl.M&S	\$1,397,358.26	\$ 1,397,358.26	\$ -	100.00%	0.00%
CAP2012-28	Work Decks	\$34,139.47	\$ 34,577.00	\$ 437.53	98.73%	1.27%
CAP2012-32	SDSTA Personnel	\$1,227,627.49	\$ 1,230,628.00	\$ 3,000.51	99.76%	0.24%
CAP2014-01	Sanford Visitor Center Design & Construction	\$308,166.18	\$ 337,017.00	\$ 28,850.82	91.44%	8.56%
CAP2014-05	CASPAR Experiment Development	\$54,543.62	\$ 301,347.00	\$ 246,803.38	18.10%	81.90%
CAP2014-06	BHSU Jonas Science Building Renovation	\$892,817.20	\$ 1,116,209.00	\$ 223,391.80	79.99%	20.01%
CAP2014-09	CASPAR Facility Development	\$927,202.65	\$ 959,709.00	\$ 32,506.35	96.61%	3.39%
CAP2014-11	BHSU Facility Development	\$314,616.16	\$ 275,000.00	\$ (39,616.16)	114.41%	-14.41%
CAP2016-01	Sanford Visitor Center Exhibit Davis Tribute	\$71,351.59	\$ 80,000.00	\$ 8,648.41	89.19%	10.81%
CAP2016-02	LZ Surface Facility Upgrades	\$367,304.02	\$ 1,500,000.00	\$ 1,132,695.98	24.49%	75.51%
CAP2016-03	LZ Xenon Gas	\$1,279,098.30	\$ 2,000,000.00	\$ 720,901.70	63.95%	36.05%
CAP2016-04	Water Inflow Project - Pipe Fusing	\$58,671.87	\$ 200,000.00	\$ 141,328.13	29.34%	70.66%
Totals		\$6,932,896.81	\$ 9,431,845.26	\$ 2,498,948.45	73.51%	26.49%

Budgets reduced due to being funded
through LBNL subcontract.
Total Reduction - \$2,983,411.74

**South Dakota Science and Technology Authority
June 16, 2016 Board Meeting**

Agenda Item: 06B

FY 2017 Budgets—Ms. Nancy Geary

6B. Fiscal Year 2017 Budget Summary and CAPEX Budget—attached. Motion requested.

Recommended Action:

Motion to approve fiscal year 2017 Budget Summary and CAPEX as presented.

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SDSTA Operating Budget Summary FY16/17

July 2016 - June 2017

		Sources of Revenue			
		Federal Funding	SDSTA Funds	Budget \$ FY16/17	Budget \$ FY15/16
Administration Budgets					Difference
	Board of Directors		\$238,800	\$238,800	\$237,201
	Executive Office		\$180,442	\$180,442	\$197,608
	Science Liaison		\$0	\$0	\$4,476
***	Science Center E & O		\$76,840	\$76,840	\$56,840
	Sanford Visitor Center		\$58,491	\$58,491	\$76,913
	Total		\$554,573	\$554,573	\$573,038
***	Science C.E & O (Approx. \$12,600 from Chris B. Memorial)				

Total Authority Operating Budgets	\$0	\$554,573	\$ 554,573	\$573,038	(\$18,465)
Federal Funding & State GOED Funding Xilinx	34,568,722		\$34,568,722	\$28,079,074	\$6,489,648
CAPEX Budget 7/2016 - 6/2017 Additional Approval Beyond Carryover	\$	4,943,955	\$ 7,042,796 Includes carry over	\$12,415,257	\$ (5,372,461)
Total for Approval	\$34,568,722	\$ 5,498,528	\$ 42,166,091	\$41,067,369	\$1,098,722
Total FTE					
Approximate Carryover CAPEX Projects	\$	2,098,841		SDSTA Funds	1.2
Grand Total with Carryover	\$	7,597,369		Other & Indirect	131.8
				FY17 Addit. DOE	5
SDSTA Funds includes funding from GOED/Foundation Xenon				Total FTE	138

SDSTA FY2017 CAPEX Budget

5/27/2016

<u>Proj. Mng</u>	<u>Project #</u>	<u>Project Description</u>	<u>New Proj.\$'s</u>	<u>Estimated Carry Over Proj.\$'s</u>	<u>Total Proj. \$'s</u>
M. Headley	CAP2014-05	CASPAR Experiment Development		\$ 216,803	\$ 216,803
M. Headley	CAP2014-01	Sanford Visitor Center Design/Constr.		\$ 7,800	\$ 7,800
M.Headley	CAP2016-01	Sanford Visitor Center Exhibit (Sign)		\$ 32,665	\$ 32,665
M.Headley	CAP2016-02	LZ Surface Facility Upgrades	\$ 131,245	\$ 1,081,418	\$ 1,212,663
M. Headley	CAP2016-03	LZ - Xenon Gas	\$ 3,972,398	\$ 714,243	\$ 4,686,641
B. Pietzyk	CAP2016-04	Water Inflow Pipe Fusion		\$ 45,912	\$ 45,912
M.Headley	CAP2017-01	Ellison Option	\$ 555,000		\$ 555,000
M.Headley	CAP2017-02	Ellison Asbestos Abatement	\$ 285,312		\$ 285,312
TOTAL ALL PROJECTS			\$ 4,943,955	\$ 2,098,841	\$ 7,042,796
*	Total Sanford Underground Infrastructure		\$ 840,312	\$ 262,715	\$ 1,103,027
**	Total Sanford Gift #2 Permitted Purposes		\$ -	\$ 40,465	\$ 40,465
***	LZ Projects		\$ 4,103,643	\$ 1,795,661	\$ 5,899,304
Total FY16 Budget			\$ 4,943,955	\$ 2,098,841	\$ 7,042,796
*	Sanford Gift#2 & BHPower Donation				
**	Fully Funded by Sanford Gift#2 Carry Over from FY16				
***	GOED and Foundation Funding				

Financial Report Continuation – Mr. Mike Headley

6D. Discuss May, Adam, Gerdes & Thompson Hourly Rate Increase—letter attached. Motion requested.

Recommended Action:

Motion to approve hourly rate increase as presented.

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MAY ADAM

— Since 1881 —

ROBERT B. ANDERSON
TIMOTHY M. ENGEL
MICHAEL F. SHAW
BRETT KOENECKE
CHRISTINA L. KLINGER
JUSTIN L. BELL
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KARA C. SEMMLER

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May 17, 2016

OF COUNSEL
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Casey Peterson
Chairman
SD Science & Technology Authority
909 St. Joseph Street, Suite 101
Rapid City, SD 57701

Mr. Mike Headley
Executive Director
SD Science & Technology Authority
630 East Summit Street
Lead, SD 57754

RE: South Dakota Science & Technology Authority
MAGT File: 4427

Dear Chairman Peterson and Director Headley:

This year marks the tenth anniversary of the Property Donation Agreement and the conveyance of the laboratory facility to the Authority. My law firm and I have very much enjoyed and have been proud to have contributed in a small way to the accomplishments of the Authority, and we hope to continue to do so for many years to come.

As with any other business, the overhead at our law firm has increased over the years. Accordingly, we respectfully request your consideration, and that of the Board of Directors, of an increase of our hourly rate.

When I first began working on this project back in 2003, then known as the Homestake Laboratory Conversion Project, our hourly rate was \$135. In 2009, the Board approved an increase to \$150 per hour. In the seven years since 2009, the standard rates payable by the State and State-related entities to contract attorneys have increased to a range of \$155 to \$170 per hour.

Given the passage of time, and what we believe to be the quality of the work product we are providing, we respectfully request that the Board consider an increase to \$160 per hour,

MAY, ADAM, GERDES & THOMPSON LLP
503 SOUTH PIERRE STREET • P.O. Box 160
PIERRE, SOUTH DAKOTA 57501-0160

Casey Peterson
Mike Headley
May 17, 2016
Page 2 of 2

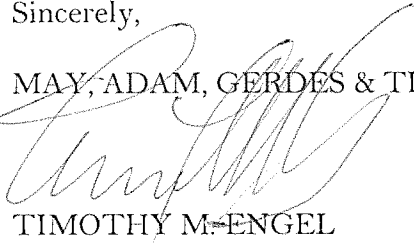
effective at a time to be determined by the Board and so as to not interfere with the Authority's budgeting cycle.

If either of you have any questions, please do not hesitate to contact me. I would be happy to give a presentation at the June board meeting if either of you deem appropriate.

Best regards.

Sincerely,

MAY, ADAM, GERDES & THOMPSON LLP

A handwritten signature in dark ink, appearing to read "Timothy M. Engel", is written over the printed name and firm name.

TIMOTHY M-ENGEL

TME:drm

Executive Director's Report – Mr. Mike Headley

The Executive Director's Report includes the following:

- 7A. SDSTA May Monthly Report—attached.
- 7B. Declaration of Surplus—Printers—attached (informational only).
- 7C. 2016 Davis Bahcall Scholar Introductions.
- 7D. Update to Facility Master Plan—copy to be distributed to each board member.
- 7E. Approve Amended Risk Transfer Protocols for Contractors and Project Sponsors—attached.
Motion requested.

Recommended Action:

- 7E. Motion to approved Amended Risk Transfer Protocol for Contractors and Project Sponsors as presented.*
- Motion to accept the Executive Director's Report as presented.*

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South Dakota Science and Technology Authority

Monthly Report

May 2016

Walter Weinig, Laboratory Director

Executive Summary

Science

Two science interns started in May. Each has a physics background and will be helping with activities at both the Davis and Ross Campuses.

Large Underground Xenon – LUX

As reported last month, LUX Weakly Interacting Massive Particle (WIMP) search data-taking officially ended May 2, having reached the goal of 300 live days. To conclude the WIMP-search dataset, a set of final standard calibrations was performed for about one week in early May, including a tritium injection as well as a standard neutron generator run. Special “endgame” calibrations commenced when authorization was issued for neutron backscattering from heavy water with partial shielding of the neutron generator.

MAJORANA DEMONSTRATOR – MJD

High-quality data continue to be collected with Module 1 in the main shield. One detector that had exhibited some electrical problems now appears to be working well.

Vacuum and cooling testing of Module 2 at the glovebox in April followed by high-voltage tests in early May revealed some electrical and thermal issues that were addressed in May. The calibration tubing surrounding the cryostat was installed and MJD expects to begin cooling the cryostat again in early June, which may allow Module 2 to be installed in the main shield as early as late June.

Compact Accelerator System for Performing Astrophysical Research (CASPAR) and BHSU Underground Campus (BHUC)

Assembly and configuration of beamline components continued during two underground shifts in May, including aligning the rotation of the slit systems and installing pumps.

The Berkeley Low-Background Counting Facility (BLBF) group continues to operate two low-background counters in the BHUC cleanroom, with one counter assaying production samples while the second detector awaits the new purge system. The BLBF group is also storing a number of Sodium Iodide (NaI) detectors underground from the decommissioned Oroville site. Further optimization for the LZ SOLO shield is underway.

Long-Baseline Neutrino Facility (LBNF) and Deep Underground Neutrino Facility (DUNE)

The final report from the LBNF test blast program was submitted in April. A schedule reflecting the change in the sequence of work for the Ross Shaft refurbishment and 4850L shaft station modifications was prepared by SDSTA engineering staff in April and submitted to the LBNF project team. The Engineering Department continues to support LBNF design efforts.

LUX-ZEPLIN – LZ

LZ personnel were onsite in May for various discussions, including the schedule for the next phase of the safety readiness review. The LZ collaboration is continuing to address action items from CD-2/3b review that was held in April. The reduced-radon cleanroom design (under contract to LBNL) is near 100% design, and interfaces with infrastructure are well understood.

Ross Shaft Rehabilitation

Two sets of new steel were installed in May. This span covered a distance of 24 feet and reached a depth of 3,765 feet. Ross Shaft steel placement will be on hold until the final shop drawings are reviewed and submitted and the next allotment of steel is fabricated.



South Dakota Science and Technology Authority

Monthly Report

May 2016

Yates Shaft

Top Down Maintenance (TDM) bolted 107 panels in the cage/skip compartments and all sets are laced in. Crews transported a total of 221 loads of material underground to support science and operations efforts in May.

Facility Infrastructure

At the end of April, the water level in the underground pool was at 5,725 feet. The net loss for the month was 39 feet. Near-term plans are to try to maintain a 600 GPM average pump rate from the underground. SDSTA staff completed all scheduled seven (7) day, thirty (30) day, and annual (360) day preventative maintenance activities.

Environment, Safety and Health

There were no environmental compliance issues or recordable injuries during the month of May.

Communications / Education and Outreach / Cultural

As the school year wound down, curriculum units were finished at Whitewood Elementary School and Lead-Deadwood High School.

The second set of two video conferences for the distance learning physics courses serving students across the state took place on May 5 from the Davis Campus. Large Underground Xenon (LUX) and MAJORANA DEMONSTRATOR (MJD) scientists talked to the groups.

Cultural and Diversity Coordinator KC Russell had a meeting with the South Dakota National Guard. They are interested in some presentations for their summer youth program.

The SDSTA Communication team is working with the communications departments at Black Hills State University (BHSU) and the South Dakota School of Mines and Technology (SDSM&T) to develop better communication channels. The Communications and E&O teams participated in the public outreach event on May 18 in association with the DUNE collaboration meeting at SDSM&T.

Neutrino Day planning continues.

Finance, Contracts and Human Resources

For Sanford-funded work, the SDSTA finished May \$7,172 under budget and is \$30,248 under budget for the South Dakota state fiscal year. For DOE-funded operations, the SDSTA was under budget by \$41,369 for the month.

SDSTA received a contract modification of \$1,458,691.81 to address Yates Motor-Generator (MG) set repairs.

The SDSTA currently employs 130 full-time and 23 temporary staff members at Sanford Lab.

SDSTA received a draft Request for Proposal (RFP) from Fermilab in May for the Operations contract. The final RFP is anticipated in late June. The new Operations contract with Fermilab is expected to be in place by October 1. Potential transition of the Ross Shaft contract from LBNL to Fermilab requires more discussion and planning by DOE with a target to complete the changeover by the end of December 2016.

Underground Access Department

Bryce Pietzyk, Director of Underground Access

Ross Shaft

Two sets of new steel were installed in May. This span covered a distance of 24 feet and reached a depth of 3,765 feet. Ross Shaft steel placement will continue to be on hold until the final shop drawings are reviewed and submitted. These modified designs were necessary to accommodate the Long-Baseline Neutrino Facility (LBNF) piping networks. Over 315 cubic yards of cellular concrete was placed in the 3950L skip pocket. This was the final skip pocket to fill for the Ross project. Until steel arrives, other projects to be completed include mucking the 5000L sump and assisting the Global Positioning Survey in conjunction with Professional Mapping Services. The Ross crews will also be working with the Underground Maintenance Crew (UMC) and dewatering crews by transporting loads for the water inflow project and 5000L pump change out.

Yates Shaft

Top Down Maintenance (TDM) bolted 107 panels in the cage/skip compartments and all sets are laced in. During May, all opened panels have required Type “C” ground support due to “blocky” ground. Upcoming plans include refurbishing the 3350L station. Also, crews transported a total of 221 loads of material underground to support science and operations efforts in May.

Underground Maintenance Crew (UMC)

The Fletcher bolter continued installing ground support on the South side of the 4850L West Lab Access Drift, working toward the Yates Shaft direction. Ground support installation in the East Lab Access Drift on the 4850L continues working toward the Yates Shaft from the #4 Winze Wye direction. Both bolting fronts will continue for several months. Crews have begun spreading washed aggregate in the 4850L West Lab Access Drift and East drift to improve footing and reduce dust. The UMC also assisted with the NASA-Astrobiologist Institute (NAI) group sampling program at various times throughout May.

The 2000L water inflow project continued progress by fusing pipe from the Ellison borehole direction. The crew has been able to fuse up to 13 sections per shift and is making great progress. Upcoming plans include continuing to fuse HDPE pipe, pouring foundations for the Oro Hondo/#5 Shaft wall and refurbishing ventilation controls on the 2000L.

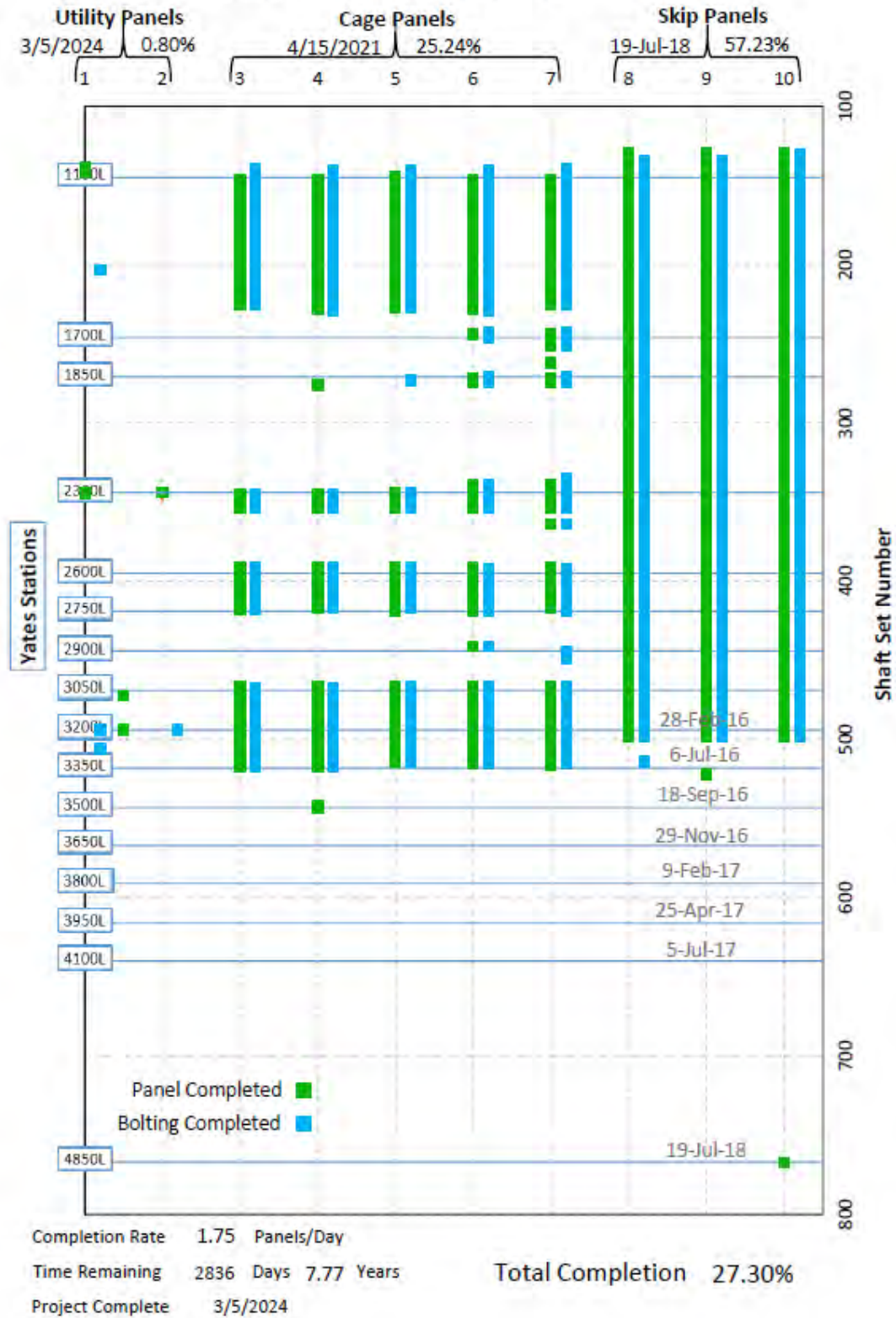


UMC: Fusing HDPE pipe.



Ross: Concrete bucket in skip compartment.

Yates TDM Progress - May 2016



**Yates: Top Down Maintenance Progress
May 2016**

Facility Infrastructure Department

Tim Baumgartner, Director of Facility Infrastructure

Summary

Facility Infrastructure effort in May was directed to the following areas: facility maintenance, equipment repair, preventative maintenance, electrical and cyber infrastructure. During May, the facility infrastructure team continued to work extensively with the Engineering and Science Departments to focus on refining the operations and maintenance of specific subsystems including carbon monoxide (CO) monitoring, underground phones, leaky feeder (radio), power quality, building upgrades, pumping, dewatering, hoist maintenance and repairs, and construction projects.

Davis and Ross Campus Maintenance

The team monitored and assisted with new equipment installation and ensured the manufacturer standards were met. Electrical inspections and documentation for Surface Lab equipment are continuing. Also, residue acid from copper cleaning was transported to the surface. Yates Shaft personnel assisted with delivery of supplies to the Davis Campus and participated in evacuation drills. Air handling equipment preventive maintenance actions continue with Johnson Controls. The fire alarm system assessments continue and corrections are being performed quarterly by the vendor. The fire alarm system is fully functional and has been tested. The Compact Accelerator System for Performing Astrophysical Research (CASPAR) equipment is being installed and will be tested in preparation for future commissioning. Sink installation at Black Hills State University Underground Campus (BHUC) was completed. Preparations for the installation of additional smoke detectors in the MAJORANA DEMONSTRATOR (MJD) space are underway.

Surface Facility Maintenance Building and Grounds

The SDSTA completed all seven (7) day, thirty (30) day, and annual (360) day preventative maintenance activities. Three staff members participated in the monthly Safety Committee meeting. Boart drill and jackleg repairs continue. The Yates Headframe maintenance hoist replacement continues. The Yates ore hoist motor generator set rebuilds have been completed. Administration parking lot repairs are 30% complete. The Administration Building re-roof project is scheduled to start June 6. A storage building for the Large Underground Xenon-ZEPLIN (LZ) experiment is being constructed in the lower Foundry Building. Summer maintenance activities continue.

Waste Water Treatment Plant (WWTP)

At the end of May, the water level in the underground pool was at 5,725 feet. The net loss for the month was 39 feet. Near term plans are to try to maintain a 600 GPM average pump rate from the underground. The team continues to support MJD with neutralizing chemical by-products of their process. All preventative maintenance duties were performed. A dry granular type of flocculent to replace fluids has been implemented to improve the iron removal process and is showing good results. Design and installation of a new indoor geo tube system to dewater the sludge and make disposal easier and more economical continues. The WWTP Operators are evaluating a recycling system—from sump #2 to the influent piping of the WWTP—to potentially eliminate sending approximately 6,000 gallons daily to the sewer. The crew started a pilot test using a bio block filter system that is being developed on site. Results to date show a 75% ammonia reduction after a three week run; the results are encouraging.

Transportation and Mobile Equipment

The team performed vehicle preventative maintenance actions and repairs to fleet and site vehicles. In addition, the team maintained underground locomotives, support equipment and continue to test and evaluate different bolter consumable parts, such as striker bars, hoses and stabilizer brackets. Repairs continue on the one-yard loader located on the 4850L. Snow removal equipment was serviced and returned to storage for the summer season.

Electrical and Cyber Infrastructure

During May, the SDSTA performed shaft pump preventative maintenance. The team continues to support the Ross Shaft rehabilitation project with the relocation of power cables in the shaft as the new steel is installed. The team continues to work reviewing and modifying the underground communications infrastructure to ensure each level has functional copper-based phones and FEMCO (i.e. twisted pair) phones at each underground facility

level. Work continues planning and preparing for cable replacement to energize medium voltage cables in support of the Ross Shaft rehabilitation project. Also, fiber optic cables are being extended to the pump room levels to allow for new phones to be installed. The team continues the CASPAR and BHUC inspections, outfitting and installations. Motor starter and controls for the Ingersoll Rand compressor located in the Ross Headframe have begun. In support of the Ross Shaft sump clean out, air compressors and power have been relocated.

Dewatering

The dewatering team is currently focusing on high pressure water systems and shaft rehabilitation support. Ross Shaft pump column repairs continue. The pump bearings on the 1250L are being closely monitored due to concerns of initial set degradation over a very short time frame. The crew is working with the dewatering team in the 5000L pump room to prepare for replacement of the pump and motor. New piping and valve assembly at the 3200L continue. The gland seal water piping from the Ross Shaft to the 2450L pump room are continuing. In addition, Standard Operating Procedures (SOPs) and Job Hazard Analyses (JHAs) continue to be developed.

Engineering Department

Walter Weinig, Engineering Director

Long-Baseline Neutrino Facility (LBNF) and Deep Underground Neutrino Facility (DUNE)

Revised proposals for pre-excavation final design were submitted to Fermilab for approval. Engineering staff also prepared updated cost and schedule estimates for the Sanford Underground Research Facility Reliability Projects, a set of projects that are planned for execution in advance of LBNF excavation.

Arup submitted a Drift Size Optimization Study draft report for review. Comments were started in May and will be submitted in early June.

SDSTA Senior Project Engineer for Science Program Integration David Taylor was selected to participate in the LBNF/DUNE Cryogen Safety Committee. He traveled to Fermilab for a meeting of the committee. David was also asked to review cryogen-related portions of the 35-ton detector being constructed and operated as part of the DUNE experiment.

Engineering staff continue to support Arup and the LBNF team for assessment of existing conditions and ongoing design, particularly with respect to the proposed conveyor system and electrical layout.

CASPAR (Compact Accelerator System Performing Astrophysical Research) and BHSU Underground Campus (BHUC)

Engineering staff provided support for the CASPAR experiment as installation continued. Equipment alignment is expected in the near future.

Background counting continued at BHUC. Cleanroom improvements are substantially complete and procedures for entering the cleanroom space continue to be phased in. Several engineering staff participated in the grand opening ceremony for the BHUC on May 9.

LUX-ZEPLIN (LZ)

Leo A Daly submitted the final designs for surface facilities associated with the LZ experiment. After reviewing the construction documents SDSTA put the project out for bid and hosted a pre-proposal meeting on site. Bids were due on June 3 with contractor selection expected by the end of June.

An engineering report was prepared and submitted to the LZ design group describing alternative upgrade paths for chillers in the Davis Campus. Engineering and operations staff conducted a test of the reheat circuits in the Davis Campus air-handling system as part of the assessment of chiller requirements to accommodate the heat load projected by the LZ collaboration.

Members of the Engineering Department also contributed to the design of cryogenic, vacuum and control systems.

Facility Infrastructure

The Engineering Department continued to support surface and underground facility infrastructure teams. Engineering staff reviewed design modifications to the Ross Shaft steel that are required to accommodate piping design changes from LBNF. GL Tiley, the outside engineering group responsible for design of the Ross Shaft steel, submitted a change order for design through the end of the project. Other key projects include assessing alternatives for dewatering system maintenance and upgrades, design and fabrication of a new bonnet for the Yates cage, evaluation of options for expanded toilet facilities on the 4850L and support for the water-inflow mitigation project.

Engineering staff are also managing facility maintenance projects including repairs to the Administration parking lot and the Yates Tunnel ground support system. Roof repairs on the Administration and Foundry buildings are expected to begin in June.

Environment, Safety and Health (ESH) Department

Noel A. Schroeder, ESH Director

Environmental Summary

There were no environmental compliance issues during the month of May.

Environmental Communication

The South Dakota Department of Environment and Natural Resources (DENR) was contacted concerning bypassing the Waste Water Treatment Plan (WWTP) Clarifier as it is no longer needed since suspended solids from the Rotating Biological Contactors (RBC's) is minimal. The South Dakota Historical Preservation Office was called to discuss submittal of the Long-Baseline Neutrino Facility/Deep Underground Neutrino Experiment (LBNF/DUNE) Section 106 Form regarding the construction of the Cryogenic Support Building and remodel of the Ross Dry. The DENR was also contacted concerning the possibility of constructing a sanitary waste disposal system to accommodate LBNF/DUNE construction.

Environmental Compliance

Water

Waste Water Discharge Summary through June 1, 2016:

*Total water discharged through outfall 001 since June 5, 2008: **5,498,871,123 gallons***

*Total Underground water treated since June 5, 2008: **3,235,533,254 gallons***

*Total Tailing water treated since June 5, 2008: **2,418,871,123 gallons***

*Total water discharged to sewer since June 5, 2008: **105,071,338 gallons***

The DENR has indicated that a new National Pollutant Discharge Elimination System (NPDES) permit would be issued to SDSTA within the next two years. SDSTA has been legally operating (discharging underground water and Barrick's tailing water) under this expired, but still existing permit.

The April Discharge Monitoring Report (DMR) was completed in the month of May. There were no violations. The DMR was electronically filed utilizing the NetDMR reporting tool.

The Davis Campus wash water was sampled for coliform/bacteria in May. There was no evidence of coliform.

Air

Data continues to be collected for stationary internal combustion engines.

Solid Waste

Recyclables (paper, cardboard, metals, plastic, batteries, lightbulbs, electronic components, petroleum products, and batteries) continue to be collected in conformance with SDSTA's Sustainability Plan.

The hazardous waste Central Accumulation Area (90-day) was inspected weekly and notes were made concerning waste additions to accommodate monthly waste accounting. The locker waste list, amounts and waste profiles were sent to Veolia (the Sanford Lab waste contractor) for a quote and contract. Efforts continue to identify a new location for this 8-foot x 21-foot locker. Tentatively, it will be relocated behind the Yates Hoist building in July.

LBNF/DUNE/LZ/CASPAR/MJD

The planned construction activity for the LBNF/DUNE Cryogenic Support Building and Ross Dry Renovation Section 106 Form was submitted to the DENR and Fermilab for review before sending the form to the consulting parties (per the Programmatic Agreement).

Environmental Support Tasks

The Spill Prevention, Control and Countermeasure (SPCC) Plan was revised and reviewed by a Professional Engineer in accordance with 40 CFR Part 112. A five-year thickness testing was performed on all above ground single walled tanks.

Additional annual site-specific SPCC training was provided to the SPCC team.

Emergency Scenario Maps were revised to update new emergency response information for the 1700L and 2000L.

Environmental inspections (storm water and safety) continue for the Administration parking lot and sidewalk repair project.

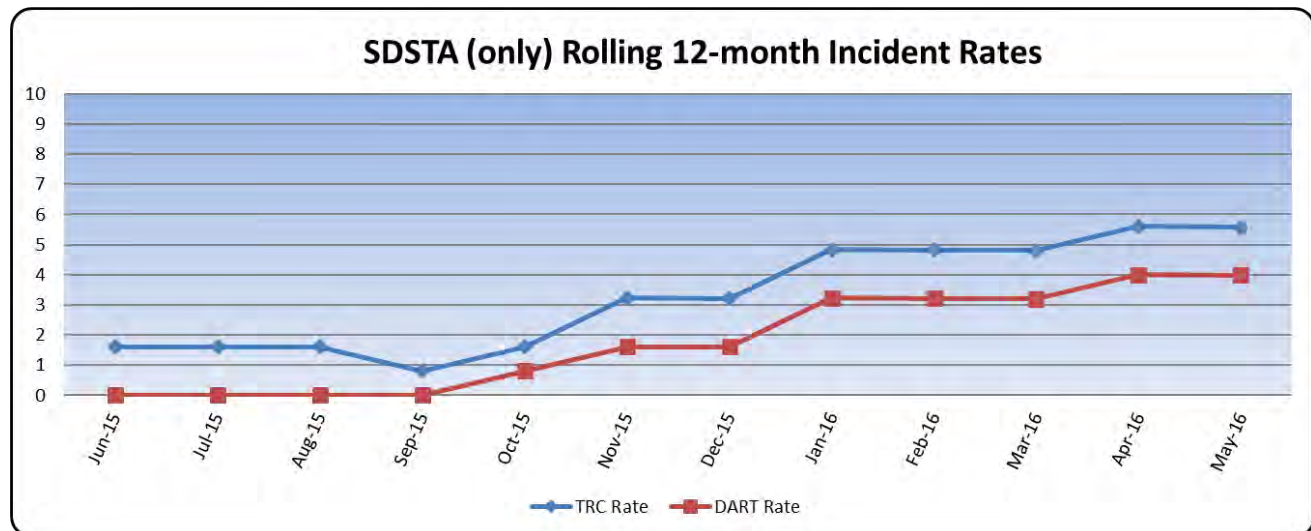
Core was cut for the Sanford Lab Homestake Visitor Center display. A particular rock sample was identified as containing gold ore. This rock will be transported to Dakota Granite for slabbing and delivered to the Visitor Center for display.

Environmental underground inspections were completed in May on the 1750L, 2000L and 4850L.

Multiple environmental surface inspections were completed at the WWTP, Ross Yard and Headframe, and Yates Yard.

A Standard Operation Procedure for shutting down and draining the tailing water pipeline was completed.

Health and Safety Summary



TRC = more than first aid treatment was given.

DART = more than first aid treatment was given *AND* restrictions were job limiting or the employee could not work. (Subset of a TRC)

May 2016 DARTS/TRC:

- Pending: April incident pending review by medical doctor

May 2016 First Aid Cases:

- May 25: Object fell on foot of Infrastructure Technician; no medical attention required

May 2016 Category 1 or 2 Events:

- No events to report

May 2016 Category 3 Events:

- May 5: Overexposure to equipment noise at WWTP which exceeded OSHA standard; new hearing protection protocols put in place

May 2016 Items of Interest:

1. Participated in the South Dakota statewide tornado exercise for surface personnel
2. Completed 2nd Quarter W-65 weighs
3. Conducted and participated in multi-agency emergency exercise underground and surface
4. Attended Emergency Response Team (ERT) rope rescue cross-training
5. Conducted ERT senior member meeting to discuss new applicants; offered four positions
6. Hosted monthly visit from Office of Risk Management
7. Provided new Sanford Lab brochure to the public from the Yates gate
8. Conducted monthly Safety Committee meeting

9. Inspected fall protection for Yates Shaft crew
10. ESH intern created new Annual Refresher Training modules
11. Completed 1st Quarter storm water inspection at WWTP
12. Provided guide services to the Life Underground NASA Astrobiology Institute (NAI) group on multiple underground levels
13. Dispersed Flash Reports on subjects of Overexposure of Noise and Hawaii Laboratory Explosion Incident
14. Conducted monthly Annual Refresher Training on subject of Communications
15. Periodic update completed on the Lead (Pb) Policy
16. Provided ESH support for WWTP confined space work
17. Commenced initial creation of Light Duty protocol and documents
18. Updated Emergency Response Maps on 4850L and phone listings
19. Conducted creek flow measurements for upcoming Whole Effluent Toxicity test
20. Prepared Personal Protection Equipment for numerous underground tours, cleaned and restocked inventory
21. Hosted vendor to discuss options of a new onsite badging system and provided tour
22. Conducted interviews for Radiation/Experiment Safety Manager position

Science Department

Jaret Heise, Science Director

During formal oxygen sensor calibrations at the BHUC, it was noted that the audible alarm signal was not active inside the cleanroom. For relatively small spaces, the alarm contractor indicated that the alarm may be too loud and only visual annunciators were installed. There may be some further optimization possible.

Two science interns started in May. Each has a physics background and will be helping with activities at both the Davis and Ross Campuses.

New location-specific Emergency Response Plan charts and maps were distributed throughout the 4850L.

The Ross Campus chiller was taken offline for several hours due to water surging in the new water pipe from the Yates Shaft to the Ross Campus. SDSTA Operations and Engineering personnel investigated and drained lines, which appears to have corrected the issue.

A dedicated rail maintenance and motor operator was appointed in May. The duties mainly focus on the 4850L, including transportation of science personnel and materials to and from laboratories at the Ross Campus.

Regular Davis Campus evacuation drills/discussions were conducted in May reinforcing the emergency procedures to use in case of smoke in along the primary entryways or in case of a liquid nitrogen spill in the Lower Davis.

Large Underground Xenon – LUX

As reported last month, LUX Weakly Interacting Massive Particle (WIMP) search data-taking officially ended May 2, having reached the goal of 300 live days. To conclude the WIMP-search dataset, a set of final standard calibrations was performed for about one week in early May, including a tritium injection as well as a standard neutron generator run.

Special “endgame” calibrations commenced when authorization was issued for neutron backscattering from heavy water with partial shielding of the neutron generator. Precautions appropriate for a high radiation area were implemented for the activity, including establishing barriers that required temporary changes to one of the door locks at the Davis Campus. To meet the LUX schedule, weekend access was accommodated.

As the neutron generator was being returned to its standard configuration, an electronics failure occurred affecting pulsing operation. While waiting for repairs at the manufacturer, the neutron generator was operated in continuous mode to perform a planned multi-elevation sweep of the LUX detector in 10-cm steps (note that neutron generator hazards were initially quantified assuming continuous mode rather than pulsing). By the end of the month, the repaired circuit board was returned and successfully tested to support the continuing campaign.

Other regular calibrations and xenon sampling continue. A few non-critical system components are showing age as LUX nears the end of operations. In one case, unstable sensor readings may require some manual intervention for the krypton injection calibrations. The photomultiplier tubes in the water tank being used as the muon veto were turned off at the end of the WIMP-search dataset.

Plans are underway to collect underground air samples, which would then be analyzed to determine the concentration of argon-37, a potential radioactive background. The Job Hazard Analysis (JHA) will involve compressing air into DOT-rated cylinders.

In conjunction with LBNF/DUNE meetings, arrangements were made for agency representatives from the Department of Energy (DOE) Office of High Energy Physics (OHEP) and Science and Technology Facilities Council (STFC, United Kingdom) to visit LUX.

After significant preparation, LUX began packing and moving out storage items from the Surface Laboratory at the end of May to support modifications for LZ that are expected to start this summer. Equipment is being staged inside a nearby building that will eventually be used for LZ storage, and a decommissioning plan pertaining to the Surface Laboratory has been submitted. The majority of the migration was completed by early June.

In May, the average LUX crew consisted of approximately four people for a combined total of 554 hours.

MAJORANA DEMONSTRATOR – MJD

Vacuum and cooling testing of Module 2 at the glovebox in April followed by high-voltage tests in early May revealed some electrical and thermal issues that were addressed in May. In particular, the cryostat cold plate

alignment was investigated and phosphor-bronze spring clips were installed to improve the consistency of cold connections. The calibration tubing surrounding the cryostat was also installed and MJD expects to begin cooling the cryostat again in early June, which may allow Module 2 to be installed in the main shield as early as late June.

For Module 1, high-quality data continue to be collected; in fact, one detector that had exhibited some electrical problems now appears to be working well. Further work was also performed on the Module 1 data acquisition system as well as the muon veto system.

Shield work in May focused on preparations for the outer polyethylene panels, including continued work at a surface facility cutting sheets. With surface storage becoming tight, Sanford Lab worked with MJD to evaluate options and precautions for staging a modest amount of HDPE in a sprinklered cutout near the Davis Campus entrance. Charcoal column filters for the main shield radon purge were assembled. MJD and Sanford Lab experts met to discuss plans for the installation of the additional fire monitoring in the MJD Detector Room, which could take place by late June.

The professional machinist who has been working with MJD returned to perform a small amount of machining in May and early June. Decommissioning work continues at the Ross Campus electroforming laboratory, including copper recycling and the return of rented liquid nitrogen dewars. Prior to the start of LBNF excavation (~late 2017), the entire laboratory will be decommissioned, including the cleanroom structure.

There was some minor confusion regarding acid waste transport in May, which served as a good reminder that the relevant procedures ensure that no regulatory time constraints are activated and give operational flexibility.

Having conducted parylene-coating operations in the Surface Laboratory cleanroom since September 2013, MJD decommissioned that equipment at the end of May to support the upcoming LZ modifications. The coater itself will be stored at Sanford Lab while chemicals no longer needed for MJD operations were transported to SDSMT. It is interesting to note that MJD made use of the Surface Laboratory for the same length of time that LUX did, namely approximately 2.75 years (LUX conducted activities at the surface facility from November 2009 until moving the detector to the Davis Campus in July 2012).

MAJORANA's effort for May consisted of an average crew of about eight people combining for a total of 1529 hours for the month. A review of hazards related to operations was held at Oak Ridge National Laboratory (ORNL) in early May in preparation for the DOE Annual review (June) and the Sanford Lab Operations review (July).

Low-Background Counting

Black Hills State University Underground Campus – BHUC: Progress continued on the new nitrogen purge system, and by the end of the month the hardware was largely assembled and installed. A walk-through inspection is being scheduled with SDSTA engineers for early June. Discussions with the User community continue, including USD (nEXO) and UNC (MJD/KURF) personnel, which could be in a position to install detectors in the summer. Students in the inaugural BHSU multi-disciplinary Research Experiences for Undergraduates (REU) program started in late May and will be involved in research projects that leverage the BHUC facility.

BHUC Physics Users: The BLBF group continues to operate two low-background counters in the BHUC cleanroom, with one counter assaying production samples while the second detector awaits the new purge system. The HPGe detectors that will be employed in the TWINS dual-crystal counter system have been sent to the manufacturer for the low-background upgrade and designs are advancing for the associated shield access system. From the decommissioned Oroville site, the BLBF group is also storing a number of NaI detectors underground. The crystals were being stored near the Davis Campus and were transported to the BHUC facility in May.

Further optimization for the LZ SOLO shield is underway. One brick in the shield appears to be contributing elevated backgrounds and a systematic search is expected to identify the source by early June. There is also interest in a modest-scale Sodium Iodide (NaI) dark matter experiment, and a Yale researcher visited Sanford Lab in May to explore possibilities at the BHUC facility.

Compact Accelerator System for Performing Astrophysical Research – CASPAR

Assembly and configuration of beamline components continued during two underground shifts in May, including aligning the rotation of the slit systems and installing pumps. Iterations continue on the documentation required to support non-beam commissioning; once updated the documents will be shared with the safety readiness review committee.

LUX-ZEPLIN – LZ

Bids for surface infrastructure construction and the reduced-radon air system were received in early June and are being reviewed. The reduced-radon cleanroom design (under contract to LBNL) is near 100% design, and interfaces with infrastructure are well understood. LZ personnel were onsite in May for various discussions, including the schedule for the next phase of the safety readiness review. Sometime in early 2017 would be appropriate to support researcher activities in the surface facilities starting around mid-2017. The LZ collaboration is continuing to address action items from CD-2/3b review that was held in April.

Other Current Research Activities

Physics: Sanford Lab utility work on the 2000L briefly interrupted the DUGL network connection but no data were lost. Discussions continue with DUGL representatives regarding decommissioning activities that will begin later this year. At that time, the DUGL GPS system installed at Sanford Lab will also be removed.

Geology: Plans continue to advance for the Permeability (k) and Induced Seismicity Management for Energy Technologies (kISMET) project on the 4850L. LBNL contracts are expected to be in place in early June and progress on implementation documentation is converging to support authorization of drilling by mid-month. In particular, a mature version of the Experiment Planning Statement is being reviewed and submissions of insurance certificates and MOU acknowledgements are being received from various institutions. Members of the collaboration were onsite in May to attend Sanford Lab training classes.

Discussions continue with members of the Rock Melt project, which is aiming to drill between the 1550L and 1700L starting in the summer to study the containment properties of crystalline rock. The group will use the same drilling contractor as the kISMET team and is also making progress on their implementation documentation.

The month of May saw further iterations with the geology group from the University of North Dakota interested in characterizing the Sanford Lab site in terms of the natural abundances of U, Th and K. The studies will inform the associated (anti-)neutrino flux from those decays as well as the local radiogenic heat production. The Sanford Lab geologic model and drill core archive will likely be leveraged in order to conduct this work, and members of the group are now considering a site visit in August.

Approximately 3000 feet of optical fiber cable was returned to GEOX™ researchers from Montana Tech of the University of Montana, where it is expected to be used for about a year before being returned to Sanford Lab for applications at the BHUC facility. The cable was used previously on the 4100L to monitor temperature.

Biology: BHSU biologists returned to the 4850L in early June to collect additional samples, which were then initially analyzed at the BHUC facility. Researchers inspected one of the common sampling sites and concluded that it had not been adversely affected by some of the recent environmental changes.

On their return trip to Sanford Lab in mid-May, representatives of the NASA Astrobiology Institute (NAI) research group successfully installed a packer in the 2000L legacy drill hole with Sanford Lab drilling support. Similar attempts were made to install a packer in a 4850L hole, but a bend in the hole requires modifications to the packer. The group also performed water sampling at sites on the 800L and 4100L. Assuming the packer changes can be made in time, the group is planning their next trip in mid-June.

Engineering: SDSMT representatives from the Civil and Environmental Engineering department visited SURF in May regarding their project to evaluate the performance of fiber-reinforced shotcrete. Tests are proposed for surface rock outcrops at the Yates Complex.

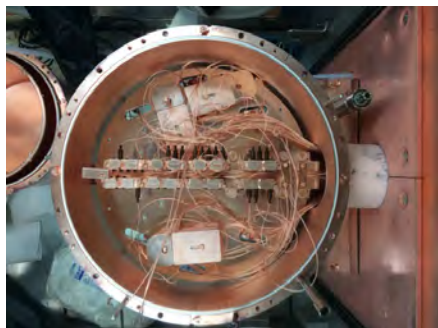


Fig. 1 MJ2 Module 2 testing in glovebox.

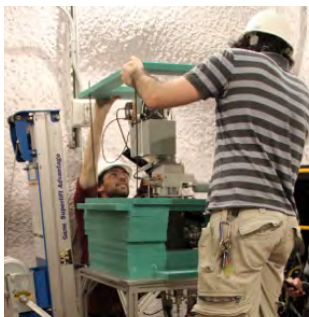


Fig. 2 LUX neutron generator shielding reconfiguration.



Fig. 3 Biologists at BHUC lab after sampling on 4850L.

Education and Outreach Department

June Apaza, Director of Education and Outreach
KC Russell, Cultural and Diversity Coordinator

Cultural Activities

Cultural and Diversity Coordinator KC Russell had a meeting with the South Dakota National Guard. They are interested in some presentations for their summer youth program.

Curriculum Units

As the school year wound down, curriculum units were finished at Whitewood Elementary School and Lead-Deadwood High School. Table A-1 lists the schools and total numbers of students reached with each unit during the pilot phase. The table includes the percentage of American Indian and Hispanic students enrolled in those schools. (Data is taken from South Dakota Department of Education statistics for the Fall 2015 enrollment period, the latest available.) Out of the 21 schools that participated in piloting units, seven (33%) have more than 10% American Indian students and one additional has more than 10% Hispanic students. A total of 30 teachers piloted units; several schools had multiple teachers working with each kit.

Forty-one teachers are registered for the professional development training on the units to take place in late June. Revisions of the units are being finalized and new kits put together in advance of the training.

Classroom presentations

The final assembly programs also took place in May with visits to Wall Elementary, Iroquois, Oldham-Ramona-Rutland and Rapid Valley (Rapid City), for a total of 588 students. The assembly programs reached a total of sixty schools in 25 counties across the state for a total of 8,488 students at all grade levels (preK through 12).

Field Trips to Sanford Lab

Sanford Lab Geologist Kathy Hart has been a big help to the Education and Outreach (E&O) team by putting together sets of rock samples of Homestake ore to use with K-12 groups who wish to include a geology activity at the Sanford Lab Homestake Visitor Center as part of their field trip. An activity using the samples was combined with a Scavenger Hunt of the Visitor Center to make a fun learning experience for upper elementary and middle school students.

Field trips hosted by the E&O Department in May are listed in Table 1. Science Education Specialist Julie Dahl coordinated the field trips this spring, and two of the E&O contract teachers (Deb Thorp, Lynn Arnold), as well as other volunteers (Letitia Fashbaugh (BHSU), Anna Hafale (BHSU) and Anna Hall (Science Department Intern)) jumped into help when the groups grew larger.

Table 1. Field Trips – May 2015

School	Grade	No. of students	No. of adults	Activities
Sturgis Williams Middle School	6	42	6	Hoist Room / Magnets&Motors/ Visitor Center Geology
Vandenberg Elementary (Douglas)	5	78	3	Hoist Room / Hoist Challenge
Conestoga Elementary (Gillette)	5	55	10	Hoist Room / Hoist Challenge
Corrall Drive (Rapid City)	5	80	6	Hoist Room / Hoist Challenge / SLHVC Geology
Bear Lodge High (Sundance)	9-12	9	6	Hoist Room

Other K-12 Activities

The second set of two video conferences for the distance learning physics courses serving students across the state took place on May 5 from the Davis Campus. LUX and MJD scientists talked to the groups. In addition, the afternoon session heard from Eisenhower Fellow Fernando Koch, Director of Research for Samsung in Brazil, about computer science careers. Dr. Koch visited Sanford Lab and observed our use of technology to reach students.

SDSTA Experiment Support Scientist Mark Hanhardt travelled to Piedmont Valley Elementary School to talk to some students interested in time travel.

Undergraduate Activities

Six interns in the Dave Bozied and Chris Bauer intern programs started in mid-May. Interns are working in the Science, Engineering, Operations and Communications Departments.

Other Activities

The E&O Department took part in the public lecture held at South Dakota School of Mines and Technology (SDSMT) during the Deep Underground Neutrino Experiment (DUNE) Collaboration Meeting, staffing an information table.

The hiring process for the Science Education Specialist was completed in late May. Two positions have been offered, and accepted. Becky Bundy and Kari Webb will be joining us full time in August.

E&O Deputy Director Peggy Norris attended the SD Experimental Program to Stimulate Competitive Research (EPSCoR) All-Investigators Meeting in Chamberlain to represent Sanford Lab E&O. The meeting was focused on ways to get scientists more in touch with education and outreach activities around the state.

The E&O Department has been involved in some initial conversations with Wes Shelton from The Educational Travel Institute of America about the potential for hosting teacher workshops for teachers from all over the world. Final or annual reports have been written and submitted for the NASA South Dakota Space Grant Consortium Program Innovation Grant and the Great Plains Foundation Grant.

Table 2. Estimated Audience Served – May 2016

Group	Students					Educators			Community		
	K-5	6-8	9-12	Undergrad	Graduate	K-12 Educator	Univ. Faculty/Staff	Informal	Parents	Sanford Lab Staff	General Public
FIELD TRIPS											
Sturgis Williams Middle School		42				3			3		
Vandenberg Elementary (Douglas)	78					3					
Conestoga Elementary (Gillette)	55					3			7		
Corrall Drive (Rapid City)	80					3			3		
Bear Lodge High (Sundance)			9			6					
<i>Subtotal</i>	213	42	9	0	0	18	0	0	13	0	0
CURRICULUM UNITS (COMPLETED IN MAY)											
Whitewood School	10					1					
Belle Fourche Middle		125				1					
Lead-Deadwood High			46			1					
<i>Subtotal</i>	10	125	46	0	0	3	0	0	0	0	0
ASSEMBLY PROGRAMS											
Assembly Programs – 4 schools	403	87	98								
Distance Learning Center (videoconference)			27			1					
<i>Subtotal</i>	403	87	125	0	0	1	0	0	0	0	0
UNDERGRADUATES / OTHER											
Sanford Lab Interns				6							
SDSMT Neutrino Talk											60
<i>Subtotal</i>	0	0	0	6	0	0	0	0	0	0	60
Grand Total	616	254	180	6	0	22	0	0	13	0	60
<i>Grand Total: 1,151 students and educators.</i>											

Table A-1. Pilot Curriculum Programs

Month	School, Town	Unit	Grade	No. of Students	% American Indian*	% Hispanic*
Oct 2015	West Middle School, Rapid City	Big Bang	8	112	9.7	4.5
Oct 2015	Hill City High School, Hill City	Star-stuff	Chemistry	40	2.0	14.7
Nov 2015	Sanborn Central Middle School, Forestburg	Big Bang	6-8	35	3.2	3.2
Dec 2015	Robbinsdale Elementary, Rapid City	Unseen	5	25	25.1	10.3
Dec 2015	Creekside Elementary, Spearfish	Force	3	23	2.9	4.8
Jan 2016	Chamberlain Junior High, Chamberlain	Big Bang	8	54	34.1	3.3
Jan 2016	Elk Point Jefferson High School, Elk Point	Star-stuff	Chemistry	38	< 1	1.9
Jan 2016	Summit Schools, Summit	Unseen	4-5	8	13.1	9.0
Jan 2016	Summit Schools, Summit	Monster Waves	6	14	14.0	9.0
			8	19		
			10	7		
Feb 2016	Timber Lake Elementary, Timber Lake	Force	4	15	57.1	1.6
Feb 2016	Aberdeen Central, Aberdeen	Star-stuff	Astronomy	13	7.5	2.1
Feb 2016	O’Gorman High School, Sioux Falls	Puddles	Biology	78	-	-
Feb 2016	Mobridge Middle School, Mobridge	Big Bang	8	48	35.8	3.4
Feb 2016	Rapid Valley Elementary, Rapid City	Unseen	5	31	8.7	4.2
Mar 2016	Piedmont Valley Elementary, Piedmont	Force	4	68	2.6	3.3
Mar 2016	Takini Schools, Howe	Unseen	5	10		
Apr 2016	Alcester-Hudson	Big Bang	8	10	2.7	5.0
Apr 2016	Flandreau Middle, Flandreau	Monster Waves	8	tbd	39.6	6.3
Apr 2016	Creekside Elementary, Spearfish	Force	3	23	2.9	4.8
May 2016	Whitewood School, Whitewood			tbd	3.7	< 1
May 2016	Belle Fourche Middle, Belle Fourche	Unseen	5	125	1.9	6.7
May 2016	Lead-Deadwood, Lead	Star-stuff	Astronomy	tbd	< 1	6.1
			Chemistry	tbd		

* Fall 2015 enrollment data from the South Dakota Department of Education

Table A-2. School Assembly programs (2015-2016 School year)

County	Community	School	Grades	No. of Programs	No. of Students
Beadle	Huron	Huron High	9,11,12	3	74
Brookings	Arlington	Arlington Schools	K-12	11	235
Brown	Aberdeen	Aberdeen Central High	11-12	4	103
Brule	Chamberlain	Chamberlain Middle	8	4	53
		Chamberlain High	10-12	6	62
	Kimball	Kimball Schools	K-12	8	208
Butte	Belle Fourche	South Park Elem	3-4	6	335
		Belle Fourche Middle	5	5	122
Davison	Mitchell	Mitchell High	9	3	78
Deuel	Deuel County	Deuel County Schools	8-9	5	61
Dewey	Timber Lake	Timber Lake Schools	4	1	27
Haakon	Midland	Midland Schools	K-8	2	28
Hand	Miller	Miller High	9,11,12	5	56
Hanson	Hanson	Hanson County School	9-11	4	77
Jackson	Interior	Interior Schools	K-8	2	52
	Kadoka	Kadoka Elem	preK-5	2	98
		Kadoka Middle/High	6-11	4	102
	Long Valley	Long Valley Schools	K-8	2	45
Kingsbury	Iroquois	Iroquois Schools	K-12	4	231
Lake	Oldham-Ramona-Rutland	ORR Schools	K-12	4	119
Lawrence	Lead-Deadwood	L-D High	12	1	8
		L-D Elem	K-5	9	530
		L-D Middle	8	3	63
	Spearfish	Creekside Elem	3-4	6	375
		Valley View Elem	K	2	100
		Mountain View Elem	K	3	180
		West Elementary	1	4	184
		Spearfish Middle	8	1	21
		Spearfish High	9	4	74
Marshall	Langford	Langford Schools	K-12	4	184
McCook	McCook	McCook Central Schools	6-12	6	129
Meade	Enning	Enning School	K-5	1	33
	Howes	Takini School	3-5	1	29
	Sturgis	Sturgis Williams Middle	6	5	131
	Union Center	Union Center School	6-8	1	11
	Whitewood	Whitewood Elem	K-6	2	108
Minnehaha	Sioux Falls	O’Gorman High	9, 11-12	11	235
Moody	Flandreau	Flandreau Middle	5-8	2	210
Pennington	Douglas	Badger Clark Elem	1	6	242
		Vandenberg Elem	4-5	21	558
	Rapid City	Grandview Elem	3,5	5	159
		Homeschool Coop	6-9	1	20
		Horace Mann Elem	3	3	48
		Pinedale Elem	K-5	17	398
		Rapid Valley	1-5	123	598
		Robbinsdale Elem	K-5	10	476
		South Canyon Elem	1	2	44
		South Park Elem	5	2	50
		Valley View Elem	2	4	95
		St Thomas More	8	1	10
		Southwest Middle	6-8	2	27
		West Middle	8	1	11

County	Community	School	Grades	No. of Programs	No. of Students
		Stevens High	9-12*	1	9
	Wall	Wall Elem	K-4	3	110
Roberts	Summit	Summit Schools	preK-12	4	152
Todd	Todd County	Todd County Middle	7-8	6	177
Union	Alcester	Alcester-Hudson Schools	1-12	8	238
	Elk Point	Elk Point / Jefferson High	10-12	1	8
		Elk Point / Jefferson Middle	3-5	3	157
Yankton		Yankton High	11-12	3	51

Communications Department

Constance Walter, Communications Director

SDSTA Communications Director Connie Walter is completing the communications plan, which includes a plan for social media, media guidelines and the Identity Standards and Style Guide. Connie attended several sessions of the DUNE conference at South Dakota School of Mines and Technology.

The SDSTA Communication team is working with the communications departments at Black Hills State University (BHSU) and the South Dakota School of Mines and Technology (SDSM&T) to develop better communication channels.

BHSU Intern Robyn Hynes started working in May. Her primary focus is Neutrino Day, social media planning and website updates.

Connie was invited to join the InterActions Collaboration, an international physics communicators group.

Community Outreach

Matt illustrated and produced geology posters for the Deep Talks presentation. The final Deep Talks of the season was held on the observation deck of the Visitor Center with SDSTA Senior Project Engineer David Vardiman, whom discussed the geology of the Northern Hills—the Open Cut was a dramatic backdrop. More than 90 people attended the talk.

The Communications Team worked with Fermilab and South Dakota School of Mines and Technology (SDSM&T) to bring Kate Scholberg to SDSM&T to give a talk on DUNE during the collaboration meeting. The event was attended by more than 60 people.

Neutrino Day

SDSTA Creative Services Developer Matt created a new Neutrino Day 2016 section on the website; Robyn wrote the content and updated the schedule. All graphics were finalized and printing of flyers, posters and rack cards completed. Several ads were designed and will run in the Black Hills Pioneer through Neutrino Day. Several sub-committee planning meetings were held in May.

Professional Development

Matt attended the Drupal Conference in New Orleans May 9-14. Over 3000 web site developers were in attendance. Matt attended an all-day training session on front end theming the first day. He attended sessions for the rest of the conference that focused on user experience design and website project management. Matt met with several developers that could help with development on a new Sanford Lab website.

Media/Site Visits

Matt and Connie participated in the NASA Astrobiology Institute (NAI) trip to the 17 Ledge on May 2-3 with author and journalist Will Hunt, who is writing a book about life underground.

Connie served as a guide for the Eisenhower Fellow, whom participated in a videoconference from the Davis Campus on May 5.

Connie and Matt served as guides for a group from Fermilab and Wondros Films on May 18. Wondros is creating a film about LBNF/DUNE.

Matt served as a guide on May 25 for the Fermi Research Alliance pre-tour visit.

Graphics, video and website

Matt met with LBNF/DUNE ESH Manager Mike Andrews in regard to signs for DOE lease space, which will be produced in June.

The website migrated to a new website hosting provider (BlackMesh). They provide a complete managed solution. The new Sanford Lab Brochure with Sandbox Studios has been completed and was printed in time for the DUNE collaboration meetings.

A canvas illustration of LBNF/DUNE was printed and mounted in the E&O conference room. To view albums in the Sanford Lab Photo Gallery go to: <http://pics.sanfordlab.org/f216003594>

Miscellaneous

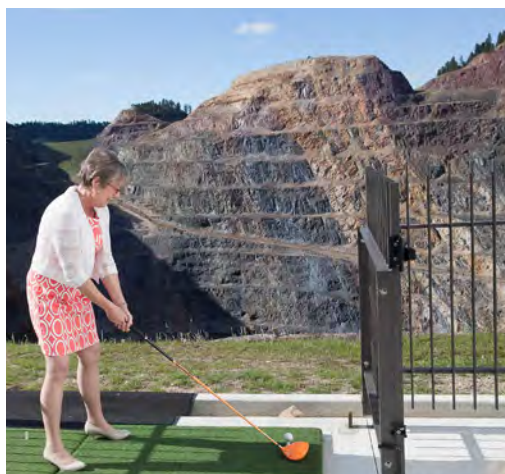
Matt continues to maintain cameras and manage files to create time-lapse videos of BHUC and CASPAR. The Communications Department continues to develop stories for Deep Thoughts; update the website; perform general web maintenance; and provide photographs and information to the media, science collaborations and educational institutions, and other laboratory departments. Matt completed work with David Vardiman on video documentation of the blast vibration study in March.

Upcoming

- Neutrino Day, July 8-9
- Touring East River—Connie will work with colleges and universities to set up presentations
- Science Happy Hour/Sioux Falls Science Festival June 10-11
- Working on displays that can be used at conferences, festivals and other public events; displays could be used by all departments at Sanford Lab
- Developing a Request for Proposal (RFP) for a web designer
- Redesigning the Sanford Lab Website

News coverage

- Jun. 03: [Sophisticated Instrument in South Dakota trying to detecting dark matter](#) by Staff Writers, Daily Star Albany
- Jun. 01: [Prototype of LUX-ZEPLIN Dark Matter Detector Tested at SLAC](#), Newswise
- May. 19: [Scientists gravitate to Rapid City to talk deep, underground neutrinos](#) by Associated Press, Capitol Journal
- May. 10: [BHSU Opens Underground Campus In Sanford Lab](#) by Chynna Lockett, SDPB
- May. 06: [Lead grants SDSTA easements for elevated conveyor system](#) by Adam Hurlburt, Black Hills Pioneer
- May. 05: [Hands-on, cutting-edge student research opportunities](#) by Kaija Swisher, Black Hills Pioneer
- May. 02: [This Mega-Science Project Is Going A Mile Underground](#) by Laura Biron, Breaking Energy



Top left: In the final Deep Talk of the season, David Vardiman presented a geologic history of the Black Hills on the deck of the Sanford Lab Homestake Visitor Center. Over 90 attended the talk.

Top right and center right: A four panel illustrative brochure highlights and gives a broad overview of Sanford Lab. These brochures are aimed at a public audience. The inside of the brochure doubles as poster and provides a quick glance of underground science at Sanford Lab.

Center left: Communications Director Constance Walter takes aim for a hole in one at the Visitor Center.

Bottom right: Dr. Kate Scholberg a neutrino scientist from Duke University presented at a public event at the South Dakota School of Mines and Technology sponsored by SD Mines and Sanford Lab.





Top: Brittany Krueger and Caitlin Casar take water samples from a hole near 17 Ledge on the 4850 Level.

Center left: Casar logs the sample that will be checked for any life that may reside in the water.

Center right: Infrastructure Technician Fritz Reller widens the 17 Ledge hole so biologists can install a packer that will help them collect samples over a longer time period.

Right: The Sanford Lab Emergency Response Team took part in a training exercise underground in May. They performed a simulated rope rescue on a decline at the Davis Campus.



Business Services Office
Sharon Hemmingson, Business Services Manager

Contracts and Procurement

SURF Operations-Lawrence Berkeley National Laboratory (LBNL): SDSTA received Modification No. 39 to Subcontract No. 6994297, adding \$1,458,691.81 to the estimated cost to address Yates M-G set repairs.

Ross Shaft Subcontract (LBNL): SDSTA received Modification No. 4 to Subcontract No. 7262800 to remove the kISMET scope of work and budget from the contract. The kISMET scope was moved to a separate purchase order that incorporates the terms and conditions established under the Ross Shaft Subcontract.

Permeability (k) and Induced Seismicity Management for Energy Technologies (kISMET): SDSTA received Purchase Order (PO) No. 7289931 authorizing facility modifications and drilling support required for kISMET.

LUX-ZEPLIN (LZ)-LBNL: SDSTA received Modification No. 2 to letter subcontract No. 7255146, adding \$373,913 to increase total incremental funding to \$500,000.

Long Baseline Neutrino Facility (LBNF)-Fermilab:

Excavation: SDSTA received a purchase order revision to modify Arup's scope of work and budget for pre-excavation final design.

BSI: Proposals were submitted to Fermilab for BSI final design revisions (Arup) and Ross Shaft design changes (G. L. Tiley and Associates).

Professional Staff Services: SDSTA received a revision to PO No. 625501 adding incremental funding of \$161,897 for the second half of calendar year 2016.

Rock Melt-RESPEC: SDSTA is finalizing a contract from RESPEC for SDSTA's role in preparing for RESPEC's DOE-supported Small Business Innovation Research (SBIR) project at the Sanford Lab.

MAY CONTRACT STATUS

Contract #	Contractor	Status	Project	Cost
2016-15	TBD	Pending	Ross Cage/Skip Hoist Upgrades	TBD
2016-16	Ateko	Contract Pending	Surface Radon Removal System	\$ 443,300
2016-17	Sundance Engineering Inc.	Contract	Spill Prevention Countermeasures and Control Plan	\$ 1,800
2016-18	TBD	RFP	LZ Surface Infrastructure Improvement	TBD
2016-19	Dangermond Keane Architect	Contract	E&O Conceptual Design	\$ 25,000
2016-20	G.L. Tiley & Associates	Contract Pending	Ross Shaft Design Changes	TBD
2016-21	TBD	RFP	Machine Shop Design	TBD
2016-22	Black Mesh	Contract	Web Hosting Services	\$ 1,600
2016-23	CVD Construction Inc.	Contract on hold	Ross/Yates Hoist Room Tuck Point Masonry Work	\$ 390,525
No #	AIP Publishing	Cancelled	Photo Licensing Agreement	N/A
No #	BHSU	Joint Agreement	Germanium Cryostat Display	\$ -

Purchase Orders: 160 POs were issued in May totaling **\$656,654.08**.

Warehouse Inventory: Warehouse inventory on May 31st, 2016 totaled **\$228,201.46**

Several SDSTA staff attended the South Dakota Celebrating Women in Business Luncheon held in Spearfish on May 13.

Information Technology (IT) Office

Deb Meyer, IT Manager

Projects

Fifteen new Cisco switches were procured and received in May to upgrade the existing copper phones to Voice over Internet Protocol (VoIP) in the Ross and Yates Shafts.

Two new Virtual Private Network (VPN) appliances were procured and received this month for the planned (end-of-life) VPN upgrade later this year.

Several databases were migrated to a new version of Microsoft SQL server this month due to end-of-life hardware.

New hardware was stood up for data logger collection to support a new version of VistaVision software for the Engineering Department.

The Sanford Lab content management platform Xerox DocuShare was upgraded to a new version in May to obtain enhancements and achieve objectives of the IT Office's strategic plan goals for F.4. IT's strategic plan objectives F.4 1 and F.4.2 were completed and reported in May.

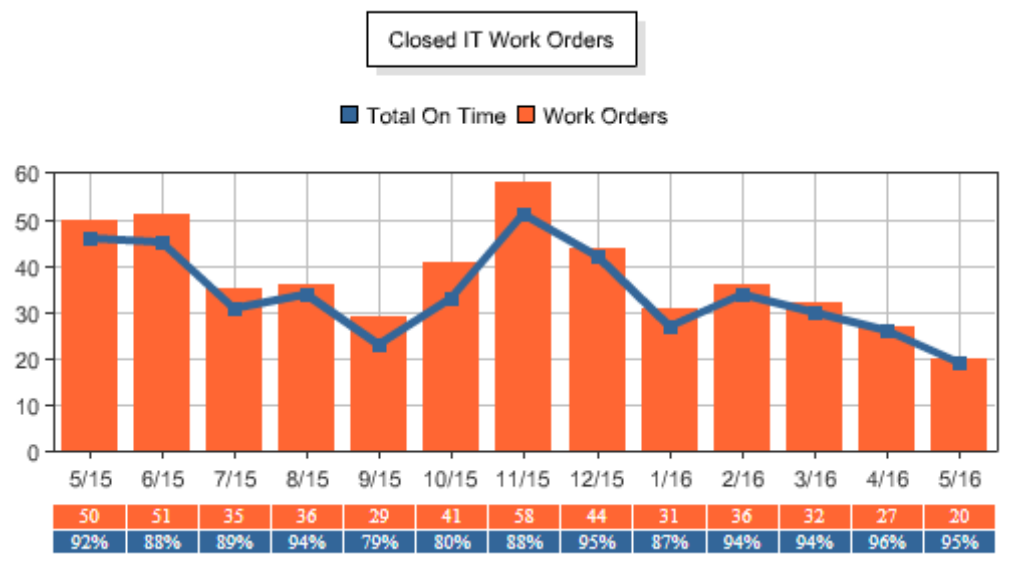
The phone system was upgraded this month to migrate to a new hardware and software platform.

SDSTA Consultant/Network Administrator Mike Rechtenbaugh began developing a "SURF Network Interconnect" document to help with the Long-Baseline Neutrino Facility/Deep Underground Neutrino Experiment (LBNF/DUNE) requirements gathering and design.

Two IT training blogs posted this month.

Daily

IT continues to monitor and review wireless and general network activity and counts, network hardware readiness, VPN Remote Access logs, and establishes new VPN and DocuShare accounts for individuals and User groups, as requested.



Daily Activities (measured in Work Orders)
May 31, 2016

Administrative Services Office

Mandy Knight, Administrative Services Manager

For the month of May, logistical and administrative support were provided for the following:

- May 4: SD Governor's Council of Economic Advisors Underground Tour (*Headley*)
- May 9: Sanford Science Education Center and BHUC Grand Opening (*held at BHSU*)
- May 12: Deep Talks (*6 of 6 in series, Visitor Center*)
- May 18: Resource Review Board Meeting (LBNE/DUNE) and Underground Tour
- May 18 & 23: DUNE Underground Tours (*May 19-22: DUNE Collaboration Meeting held at SDSM&T*)
- May 18: SD Office of Risk Management Meeting (*Weinig*)
- May 25: Blackboard Transact Visit (*C Knight/Schroeder*)

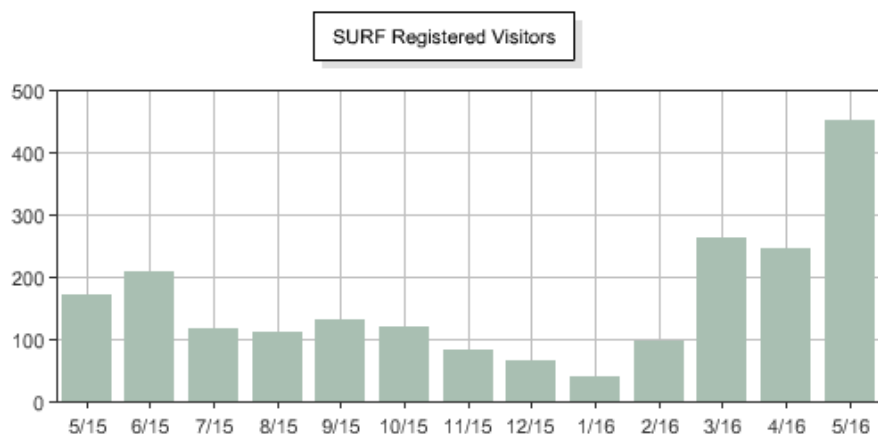
Preparation and planning continue for upcoming meetings at Sanford Lab:

- June 1: E&O Building Conceptual Design Meeting (*Weinig*)
- June 6-July 12: Davis Bahcall Scholars (*Mount*)
- June 15-16: SD Chamber of Commerce & Industry Underground Tour June 15; Annual Meeting; June 16
- June 16: SDSTA Board of Directors Annual Meeting (*E&O Conference Room*)
- June 20-24: SD GEARUP (*Apaza*)
- June 24: Fermi Research Alliance Board of Directors Visit and Underground Tour (*Weinig*)
- July 6-8: Environment, Safety and Health Oversight Committee Review (*Schroeder*)
- July 8-9: Neutrino Day (*evening of July 8 and all day July 9*)
- July 15: Sanford Lab All Hands Meeting (*Headley*)
- July 25-26: MJD Final Readiness Review (*Christofferson*)
- July 25-29: CERN Visitors (*Headley*)
- July 28: SD Research Affairs Council Visit and Underground Tour (*Headley*)

With the help of full-time custodian Kaman Dragoo, the Administration and Education and Outreach Buildings are being cleaned and maintained daily Monday through Friday, with the exception of Wednesdays to assist Laboratory Custodian Robyn Varland on the 4850L.

Laboratory Receptionist Brooke Anderson continues to assist SDSTA Underground Foreman Jack Stratton to update the water inflow charts and timber inspection database. Monthly Researcher hours were tracked and Science training records processed. Monthly invoices were coded for the Finance Department. Safety messages and other important news continue to be updated on a daily basis on digital displays throughout the facility. The Information Technology Office has procured new digital display software and training will be forthcoming.

The May Visitor Log Report was sent to the SD Fusion Center/Homeland Security. The log was electronically submitted utilizing the database reporting tool. In May, a total of 452 people visited the lab; this total includes 186 Visitors (non-employees who attend meetings or surface/underground tours), 253 Contractors and 13 Users (teachers, researchers, students 18 years of age and older). The totals do not include school group visits (organized and reported by the Education and Outreach Department).



Sanford Underground Research Facility Registered Visitors
May 2016

The DUNE Collaboration Underground Tours held on May 18 and 23 were successful thanks to the help of our dedicated Sanford Lab team. DocuShare collections continue to be organized and archived as needed. Mandy continues to assist the Communications Department with copyediting and updating content on the Sanford Laboratory website, as needed. Also, Neutrino Day planning continues and is ramping up as the event draws nearer. Telephone lists were updated and distributed to the project team. Monthly reports for LBNL and SDSTA were compiled, edited and distributed.

A couple of SDSTA Policies and Procedures are being updated or newly created for approval at the next board meeting. The board packet is being created and assembled for distribution in early June. The board packet will be made available for public inspection as required by the "Open Meetings" requirements of the state law, placed in a binder in the reception area of the Administration Building, posted to the Boards and Commissions portal and linked to the Sanford Lab website.

Finance and Human Resources Department
Nancy Geary, Chief Financial Officer and Department Manager

Included in the Financial Report are the following:

- DOE SDSTA FY2016 SPA Curve as of May 2016
- Balance Sheet as of May 31, 2016
- Comprehensive Statement of Income May 2016
- Comparative Balance Sheet – May 2016 vs. May 2015
- Comparative Statement of Income – May 2016 vs. May 2015
- Available Cash as of May 2016
- Operating Budget Summary
- CAPEX Budget Summary
- May 2016 and YTD CAPEX Budget – actual vs. budget
- SDSTA Staffing Plan by Funding Source as of May 2016

Department of Energy (DOE) SDSTA FY2016 Scheduled Performed Actual (SPA) Curve

This graph represents an analysis of the DOE Subcontract No. 6994297 Operations scheduled funding compared to actual. The report shows funding through September 2016 along with information related to Funded-to-Date dollars, Scheduled dollars, Performed dollars and Actual dollars by month. Actual dollars represent actual invoices for the months sent to Lawrence Berkeley National Laboratory (LBNL) for reimbursement. For May, the invoices totaled \$1,646,163, which is lower than the anticipated reimbursements of \$1,687,532 by \$41,369. Since the inception of this subcontract in February 2012, the actual expenses are at \$59,416,617 which is lower than the budget of \$59,488,920 by \$72,303.

Balance Sheet Items

Cash in Local Checking—Total on hand at May 31, 2016 was \$491,619; down from last month by \$203,265. Funds on hand were necessary to pay employee medical/life/vision insurance all due June 1, 2016. The balance also contains funds received from federal contracts late in the month on open accounts receivable.

Cash with State Treasurer—Total balance of \$13,621,072. This is unchanged since April.

Billed Accounts Receivable (A/R)—Billed A/R represents any open invoices based on contracts from sources such as LBNL, Fermilab, other smaller contracts from other universities and Barrick/Homestake Mining Company. Total is at \$3,396,163; up from last month by \$97,056. Included in the balance are open invoices to LBNL for \$2,428,640; representing invoices for the Large Underground Xenon (LUX) subcontract, LUX-ZEPLIN (LZ) engineering support, the Ross Shaft rehabilitation work and invoices for the Operations subcontract No. 6994297. Additional open invoices include \$916,366 from Fermilab, \$13,024 from small university subcontracts, as well as open invoices from Barrick equaling \$37,626. Additionally, there is an open receivable for \$507 from Xilinx, Inc., the commercial organization that has established an experiment located near the 4850L Davis Campus. As of May 31, there were past due invoices of approximately \$409,000 that LBNL paid in early June.

Unbilled A/R—Balance of (\$3,204). Unbilled A/R represents items that have not been billed on various contracts. This amount is immaterial. May's balance has decreased by \$116,880.

Other A/R—Current balance of \$148,973. This balance represents any Interest Receivable and Miscellaneous Accounts Receivable. The balance increased by \$8,513 which represents the interest accrual for the month.

Inventory/Supplies—Balance at \$2,473,623 for fixed assets being stored but not in service. The balance has decreased by \$47,984 for placing into production the IVAC vacuum system purchased in January 2016.

Inventory Warehouse/Personal Protective Equipment (PPE)—Current balance of \$368,922. This balance represents the warehouse inventory that was purchased by SDSTA prior to federal funding and xenon gas inventory for experiment use. This balance is unchanged from April.

Other Current Assets—This listing on the balance sheet represents the balances of both prepaid insurance – \$392,596 and prepaid other – \$123,328. Total balance of \$515,924 is up from last month by \$292,504. This increase represents the renewal of our worker's compensation insurance along with the monthly insurance expenses. Changes in prepaid other miscellaneous items are also included.

Fixed Assets—Total of \$85,681,109 (net of depreciation through May 31, 2016). Fixed assets increased for placing the IVAC vacuum system into production. Yet, after our monthly depreciation the net decrease is \$124,729.

Work in Progress—This balance represents the current fiscal year progress being made using Sanford/ SDSTA Funds to support the budgeted projects on the CAPEX budget less any items that are being capitalized within the Fixed Asset designation. Current balance has increased by \$148,036 to 5,519,878. The balance represents the current year's project costs (not including personnel) funded by these sources.

Capital Lease—This balance of 359,206 represents the deep pump system capital lease. The balance has decreased by \$15,003. The lease through AmWest, Inc. was renegotiated to include transference of property to us at the end of the lease term in January 2018. The rental payments are being directly charged to the LBNL federal subcontract. Per the subcontract, the pumping system will become the property of the federal government at the end of the lease period. The equipment will be fully expensed over the period of the lease at which time it will be removed (along with the lease liability) from the SDSTA's balance sheet.

Pension Deferred Outflows—This designation on our Balance Sheet reflects the requirements related to the Governmental Accounting Standards Board (GASB) Nos. 68 and 71 in reference to pensions. SDSTA is required to report the net pension asset or liability on the face of our financials along with related deferred inflows and outflows. The Net Pension Asset is a restricted asset. Thus the equity created would also be restricted (restricted for pension benefits). The balance shown as a noncurrent asset is \$7,176,478 created by fiscal year 2015 final entries.

Investment in Captive Insurance—This account classification reflects the transfer of funds from our Cash held with the State (Indemnification Fund) to the Captive Insurance Company. The balance of \$2,500,000 was authorized by House Bill (HB) No. 1186 from the 2015 Legislative Session.

Total Assets—Total of \$122,249,761. This balance is up from last month by \$38,246; which represents the net activity as listed above.

Accounts Payable—Our Accounts Payable balance of \$1,925,928 (including Accounts Payable and Accounts Payable Accrual) at the end of the month compared to last month has increased by \$457,662. This increase is primarily due to the increased amount owed to Joy Global for our Yates Motor-Generator set maintenance items.

Accrued Payroll Liabilities—Current balance of \$808,429 has decreased by \$38,513 from last month. This represents the net change between earned vacation and vacation taken and other changes in other employee benefit-related liabilities.

Long Term Accrued Employee Benefit/Lease—This balance of \$359,206 denotes the liability associated with the capital lease for the deep pump system from AmWest, Inc. This balance has decreased by \$15,003 for the months' reduction in the lease amount owed.

Long Term Xenon Notes Payable—This designation represents the \$2M of funding received from the South Dakota Community Foundation (SDCF) for the purpose of purchasing xenon for experiment use at Sanford Lab. Two purchases of 100,000 liters each of xenon were received in November and February.

Pension Deferred Inflows—This classification reflects the requirements of GASB Nos. 68 and 71, as discussed earlier. The balance of \$4,412,373 represents the net difference between projected and actual investment earnings on our pension plan with the South Dakota Retirement System.

Total Liabilities—Total Liabilities increased by \$404,146 (from \$9,101,790 to \$9,505,936), which reflects the net activity listed above.

Total Equity—Decreased to \$112,743,826 from the previous month \$113,109,725. Included is an additional Restricted Equity account reflecting the restricted \$2,357,275 held by the State on behalf of the SDSTA for future xenon purchases, infrastructure upgrades for experiments and future interest payments to investors in xenon purchases for the LZ experiment.

Total Liabilities & Equity—Increase to \$122,249,761 from the previous month of \$122,211,515.

Statement of Income Items

On the SDSTA's Statement of Income, the DOE Subcontracts are consolidated into one line item on the report. Included in this amount are various subcontracts from LBNL, Fermi National Accelerator Laboratory (FNAL), as well as a small contract for the MAJORANA project with the University of North Carolina. Total revenue for this fiscal year through May 2016 is 21,481,307 (increase from April of \$2,357,628). Included in this increase is the contract with LBNL for the Ross Shaft rehabilitation that began in January.

National Science Foundation (NSF)/National Aeronautics & Space Administration (NASA) Subcontracts—Total revenue through May 2016 from this particular funding is \$6,743. The balance represents revenue from a small subaward through University of Minnesota and a new subaward through Northwestern University from NASA.

State Revenue—Year-to-date State Revenue equals \$2,018,700. Included is the \$2M received in September from the Governor's Office of Economic Development (GOED) to be used for the purchase of xenon, experiment infrastructure improvements and interest for xenon investors. Funding has been received from Black Hills State University (BHSU) and South Dakota School of Mines and Technology (SDSM&T) in the amount of \$9,776 for cleanroom related expenses and monthly operational expenses in the Ross Underground Campus. The balance also includes a small amount of funding (\$924) from the University of South Dakota state research funds for the Center for Ultra-Low Background Experiments in the Dakotas (CUBED) as well as \$8,000 from the South Dakota Experimental Program to Stimulate Competitive Research (EPSCoR) to fund Davis Bahcall scholars work experience internships from this past summer.

Contributions & Donations—Fund raising activities include the receipt of \$125,000 from the Great Plains Education Foundation, \$25,000 from the Deadwood Historical Commission and \$57,782 from the City of Lead. In January we received the final \$200,000 pledged last year by Black Hills Energy (fka Black Hills Power) for the continued development of Sanford Lab. Total contributions and donations for this fiscal year through May 2016 is \$407,782.

Interest income recorded for the current fiscal year on State Funds is at \$103,940. This represents interest accruing at 0.75% on the cash held by the State on behalf of the SDSTA.

Direct Costs are then listed on the Statement of Income. The classifications for Unallowable Costs and Indirect Costs are listed as well on this report to follow the federal contracting format. Direct Costs/Unallowable Costs are at \$17,767,380 for the year. Indirect Costs including fringe benefits are at \$7,494,050. Other Income through the month of May is at \$290,597 which represents miscellaneous income received from Xilinx (a commercial company) discussed earlier, and small amounts for water treated and electric usage for Barrick.

Net Income for the year is at \$342,240.

Comparative Balance Sheet

Significant differences include Total Cash with State Treasurer being lower by \$10,137,938 from this time last year as funds were expended over the 12-month period. This reduction in cash also includes the transfer of \$2,500,000 to Investment in Captive Insurance. Yet, the new Experiments account has an increase of \$2,357,275 for funds received to be used toward xenon purchases, interest payments to investors and to assist with infrastructure upgrades for experiments. Other notable differences exist for changes in Fixed Assets which have increased by \$14,183,296 primarily due to the year-end capitalization of fixed assets for FY2015. Work in Progress has decreased from this time last year by \$3,991,854 represented by a decrease in activity in our CAPEX projects when comparing the two time frames. Increases of \$7,176,478 and \$2,500,000 are a result of the two new designations—Pension Deferred Outflows and Investment Captive Insurance—respectively. In summary, Total Assets have increased by \$9,921,131. Total Current Liabilities have decreased by \$782,743 from this time last year, primarily due to a decrease in Accounts Payable. Total Other Liabilities have increased by \$6,235,595 because of the new designations for Long Term Xenon Notes Payable and Pension Deferred Inflows. Total Equity has increased by \$4,468,278 from this time last year. Even though Restricted Funds have decreased, the Investment in General Fixed Assets has increased for the capitalization of projects from Fiscal Year 2015. In summary, Total Liabilities & Equity have increased by \$9,921,131.

Comparative Profit/Loss

Total Revenue for year-to-date May 2016 compared to year-to-date May 2015 has increased by \$635,203. DOE subcontract revenue has increased by 33%. State Revenue has decreased from last year. Last year we received an

appropriation of \$3,950,000 from the State Legislature. Yet, in the current year we received \$2M from the GOED (State of South Dakota) to be used for the purchase of xenon, experiment infrastructure improvements, and interest for xenon investors. Contributions & Donations are slightly lower when comparing the two time frames. Interest Income is lower for year-to-date May 2016 due to a lower cash balance with the State compared to last year. Direct Costs and Indirect Costs for year-to-date May 2016 compared to this time last year show a combined increase of \$4,295,393 (20.4% increase), primarily due to increased contractual services for the Long-Baseline Neutrino Facility (LBNF) projects. Net Income for the comparative time periods shows a decrease of \$3,625,941 which reflects the net activity as listed above.

Available Cash

This report reflects our available cash after noting the restricted cash balances in the Indemnification and Mine Closure accounts, and funds held for xenon purchase, experiment infrastructure upgrades and interest for investors. The Sanford Gift No. 2 account is no longer designated as “restricted” in the same sense as the Indemnification and Mine Closure accounts due to the signing of the Fourth Amendment to the Homestake Gift Agreement. After our liabilities are noted, \$1,586,014 is available to be used for a limited scope of SDSTA expenses (Board, Administration, Education & Outreach, Science Liaison, and Sanford Visitor Center Director expenses not covered by the current DOE funding), for current contracts related to the various capital expenditure projects, and towards the specific educational projects listed in the Fourth Amendment.

Operating Budget Analysis

This report is separated into three sections: SDSTA-funded activities, Federal & State funded activities and Indirect expenses that benefit various activities. A few areas are over budget for the month, but by immaterial amounts. Indirect Charges Other are over budget primarily due to depreciation expense. Total operating expenses are under budget for May, 2016 by \$120,640, Year-to-date figures are almost all under budget for a total under run of \$892,151.

Capital Expenditure Budget Analysis

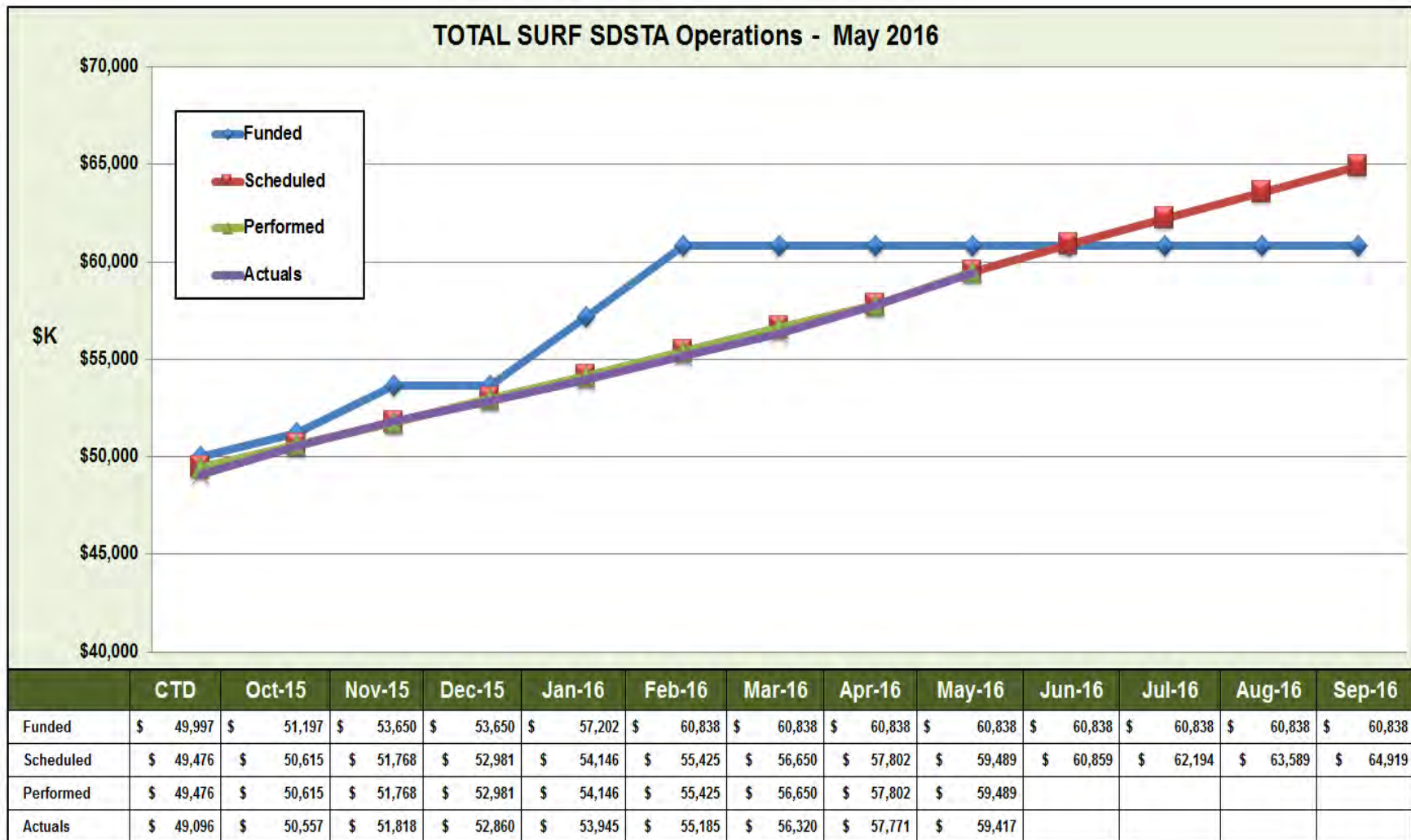
Our current capital expenditure projects have been condensed and are listed from CAP2012-27—CAP2016-04 with various breaks in the numbering sequence. Total project dollars have been reduced to \$9,431,845, which represents the approved budget from the June 2015 Board meeting, the reduction based on moving funding for the Ross Rehab/Personnel to Federal Funding, along with the additional \$200,000 received from Black Hills Energy. The \$200,000 will be funding a pipe fusion contract and materials for our ongoing water inflow project. All projects with the exception of the LZ Surface & Facility Upgrades and LZ Xenon Gas Purchase are funded by the balance of Sanford Funds as directed by the Fourth Amendment to the Homestake Gift Agreement, funding from private fund raising activities, a small amount from BHSU and SDSTA funds including interest. Funding for CAP2012-27 Ross Shaft Rehabilitation has transitioned through LBNL with a new contract beginning in January 2016. Funding for the LZ Surface & Facility Upgrades and LZ Xenon Gas Purchase was secured from the GOED granting \$6,000,000 over three years. Additionally, loan documents have been executed for \$2,000,000 from the SDCF to be used for xenon purchases. This \$2,000,000 was received in October. In early February loan documents were executed with the South Dakota State University Foundation committing \$2,000,000 as a loan for further xenon purchases. In May, 2016, we spent \$50,435 on our CAPEX projects out of the budgeted \$57,591. Year-to-date we have expended \$6,932,897 on this list of projects.

Human Resources

We currently have 130 full time employees and 23 temporary staff, primarily Emergency Response Team members. Infrastructure Technician Blaine Burleson started employment May 25, 2016. The open Engineering position as well as the open Radiation/Experiment Health & Safety Manager are both in the process of being backfilled.

State Board of Internal Controls

SDSTA Executive Director Mike Headley, Legal Counsel Tim Engel and myself attended the first meeting of the State Board of Internal Controls on May 2, 2016. Policies concerning internal controls for State Agencies and State Authorities were discussed. Included were policies relating to Code of Conduct and Conflicts of Interest. Thus the State of South Dakota will be bolstering various standards to strengthen internal controls.



**DOE SDSTA FY 2016 SPA Curve
May 2016**

DIVISION: ALL

BALANCE SHEET

ASSETS

AS OF
05/31/16

CURRENT ASSETS

First Interstate Checking	\$	463,986.27
First Interstate Other		27,632.89

Total in Local Checking		491,619.16
SD Treas: Indemnification		7,500,000.00
SD Treas: Mine Closure		1,379,921.18
SD Treas: Operating		168,270.49
SD Treas: Sanford		111,945.35
SD Treas: Sanford Gift #2		2,103,659.97
SD Treas: Experiments		2,357,275.00

Total with SD Treasurer		13,621,071.99
Billed A/R		3,396,162.87
Unbilled A/R		(3,204.48)
Other A/R		148,972.54
Inventory - Supplies		2,473,622.74
Inventory - Warehouse		368,921.81
Other Current Assets		515,923.90

Total Current Assets		21,013,090.53

FIXED ASSETS

Land, Underground & Other	12,398,635.03
Bldgs & Infrastructure	8,881,327.62
Improvements	64,557,726.85
Computer Equipment	455,888.25
Equipment & Fixtures	10,187,773.06
Accum Depr & Amort	(10,800,242.04)

Total Fixed Assets	85,681,108.77

OTHER ASSETS

Work in Process	5,519,877.65
Equipment - Capital Lease	359,206.46
Pension Deferred Outflows	7,176,478.00
Investment Captive Ins.	2,500,000.00

Total Other Assets	15,555,562.11

TOTAL ASSETS

=====

\$ 122,249,761.41

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DIVISION: ALL

BALANCE SHEET

LIABILITIES & EQUITY

AS OF
05/31/16

CURRENT LIABILITIES

Accounts Payable	\$	1,898,139.69
Other Payables		27,788.24

Total Accounts Payable		1,925,927.93
Accrued Payroll Liab		808,428.51

Total Current Liabilities		2,734,356.44

OTHER LIABILITIES

LT Accrued EB/Lease		359,206.46
LT Xenon Notes Payable		2,000,000.00
Pension Deferred Inflows		4,412,373.00

Total Other Liabilities		6,771,579.46

EQUITY

Restricted: Indemnificati		7,500,000.00
Restricted: Captive		2,500,000.00
Restricted: Sanford I.Lab		111,945.35
Restricted: Mine Closure		1,379,921.18
Restricted: Sanford Gift2		1,969,160.00
Restricted: Pension		2,764,105.00
Restricted: Experim. Int.		2,357,275.00

Total Restricted Funds		18,582,406.53
Investment in Gen FA		85,681,108.77
Unrestricted Funds		8,480,310.21

Total Equity		112,743,825.51

TOTAL LIABILITIES & EQUITY

=====

\$ 122,249,761.41

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ALL

STATEMENT OF INCOME

FOR THE PERIOD ENDING 05/31/16

	YR-TO-DATE
REVENUE	
DOE Subcontracts	\$ 21,481,307.40
NSF/NASA Subcontracts	6,743.13
State Revenue	2,018,700.45
Contributions & Donations	407,781.62
Checking Interest	143.23
Interest Income	103,940.32

TOTAL REVENUE	24,018,616.15
DIRECT COSTS	
Direct Labor	6,632,052.98
ERT Labor	30,458.79
Board of Directors	10,840.00
Capital Outlay >\$5K	135,340.65
Contractual Svcs	6,599,878.32
Inventory	265,545.34
Supplies	1,352,354.35
Travel - Domestic	82,116.65
Travel - Foreign	39,239.88
Utilities	2,043,191.72
Other Direct Costs	260,960.06
Unallow/Unbill Costs	315,401.58

TOTAL DIRECT COSTS	17,767,380.32
INDIRECT COSTS	
Fringe Benefits	3,460,084.20
Overhead	4,033,965.69

TOTAL INDIRECT COSTS	7,494,049.89

GROSS PROFIT FROM OPERATIONS	(1,242,814.06)

OTHER INCOME	
Water Treatment	222,314.62
Miscellaneous Income	65,025.72
Other Operating Income	3,256.65

TOTAL OTHER INCOME	290,596.99
OTHER EXPENSES	
Loss(Gain) on Sale of FA	155,509.06
Reclass Incr Net Assets	(1,449,965.71)

TOTAL OTHER EXPENSES	(1,294,456.65)
	=====
NET INCOME/LOSS ()	342,239.58
	=====

DIVISION: ALL

COMPARATIVE BALANCE SHEET

ASSETS

	AS OF 05/31/16	AS OF 05/31/16	\$ CHANGE	% CHANGE
CURRENT ASSETS				
First Interstate Checking	\$ 463,986.27	\$ 716,436.72	\$ (252,450.45)	-35.24%
First Interstate Other	27,632.89	57,888.45	(30,255.56)	-52.27%
	-----	-----	-----	-----
Total in Local Checking	491,619.16	774,325.17	(282,706.01)	-36.51%
SD Treas: Indemnification	7,500,000.00	10,000,000.00	(2,500,000.00)	-25.00%
SD Treas: Mine Closure	1,379,921.18	1,362,763.38	17,157.80	1.26%
SD Treas: Operating	168,270.49	648,578.00	(480,307.51)	-74.06%
SD Treas: Sanford	111,945.35	3,136,756.48	(3,024,811.13)	-96.43%
SD Treas: Sanford Gift #2	2,103,659.97	4,660,912.00	(2,557,252.03)	-54.87%
SD Treas: SB196 Transfer	-	3,950,000.00	(3,950,000.00)	-100.00%
SD Treas: Experiments	2,357,275.00	-	2,357,275.00	100.00%
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Total with SD Treasurer	13,621,071.99	23,759,009.86	(10,137,937.87)	-42.67%
Billed A/R	3,396,162.87	2,760,154.97	636,007.90	23.04%
Unbilled A/R	(3,204.48)	(5.79)	(3,198.69)	55245.00%
Other A/R	148,972.54	382,918.71	(233,946.17)	-61.10%
Inventory - Supplies	2,473,622.74	2,551,692.22	(78,069.48)	-3.06%
Inventory - Warehouse	368,921.81	369,788.53	(866.72)	-0.23%
Other Current Assets	515,923.90	185,218.46	330,705.44	178.55%
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Total Current Assets	21,013,090.53	30,783,102.13	(9,770,011.60)	-31.74%
FIXED ASSETS				
Land, Underground & Other	12,398,635.03	12,353,375.03	45,260.00	0.37%
Bldgs & Infrastructure	8,881,327.62	8,881,327.62	-	0.00%
Improvements	64,557,726.85	49,274,276.00	15,283,450.85	31.02%
Computer Equipment	455,888.25	362,464.95	93,423.30	25.77%
Equipment & Fixtures	10,187,773.06	9,468,941.64	718,831.42	7.59%
Accum Depr & Amort	(10,800,242.04)	(8,842,572.65)	(1,957,669.39)	22.14%
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Total Fixed Assets	85,681,108.77	71,497,812.59	14,183,296.18	19.84%
OTHER ASSETS				
Work in Process	5,519,877.65	9,511,731.54	(3,991,853.89)	-41.97%
Equipment - Capital Lease	359,206.46	535,984.64	(176,778.18)	-32.98%
Pension Deferred Outflows	7,176,478.00	-	7,176,478.00	100.00%
Investment Captive Insurance	2,500,000.00	-	2,500,000.00	100.00%
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Total Other Assets	15,555,562.11	10,047,716.18	5,507,845.93	54.82%
	=====	=====	=====	=====
TOTAL ASSETS	\$ 122,249,761.41	\$ 112,328,630.90	\$ 9,921,130.51	8.83%
	=====	=====	=====	=====

DIVISION: ALL

COMPARATIVE BALANCE SHEET

LIABILITIES & EQUITY

	AS OF 05/31/16	AS OF 05/31/16	\$ CHANGE	% CHANGE
CURRENT LIABILITIES				
Accounts Payable	\$ 1,898,139.69	\$ 2,783,788.99	\$ (885,649.30)	-31.81%
Other Payables	27,788.24	11,662.15	16,126.09	138.28%
	-----	-----	-----	-----
Total Accounts Payable	1,925,927.93	2,795,451.14	(869,523.21)	-31.10%
Accrued Payroll Liab	808,428.51	721,647.95	86,780.56	12.03%
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Total Current Liabilities	2,734,356.44	3,517,099.09	(782,742.65)	-22.26%
OTHER LIABILITIES				
LT Accrued EB/Lease	359,206.46	535,984.64	(176,778.18)	-32.98%
LT Xenon Notes	2,000,000.00	-	2,000,000.00	100.00%
Pension Deferred Inflows	4,412,373.00	-	4,412,373.00	100.00%
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Total Other Liabilities	6,771,579.46	535,984.64	6,235,594.82	1163.39%
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TOTAL LIABILITIES	9,505,935.90	4,053,083.73	5,452,852.17	134.54%
EQUITY				
Restricted: Indemnificati	7,500,000.00	10,000,000.00	(2,500,000.00)	-25.00%
Restricted: Captive	2,500,000.00	-	2,500,000.00	100.00%
Restricted: Sanford I.Lab	111,945.35	7,086,756.48	(6,974,811.13)	-98.42%
Restricted: Mine Closure	1,379,921.18	1,362,763.38	17,157.80	1.26%
Restricted: Sanford Gift2	1,969,160.00	4,660,912.00	(2,691,752.00)	-57.75%
Restricted: Pension	2,764,105.00	-	2,764,105.00	100.00%
Restricted: Experim. Int.	2,357,275.00	-	2,357,275.00	100.00%
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Total Restricted Funds	18,582,406.53	23,110,431.86	(4,528,025.33)	-19.59%
Investment in Gen FA	85,681,108.77	71,497,812.59	14,183,296.18	19.84%
Unrestricted Funds	8,480,310.21	13,667,302.72	(5,186,992.51)	-37.95%
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TOTAL EQUITY	112,743,825.51	108,275,547.17	4,468,278.34	4.13%
	=====	=====	=====	=====
TOTAL LIABILITIES & EQUITY	\$ 122,249,761.41	\$ 112,328,630.90	\$ 9,921,130.51	8.83%
	=====	=====	=====	=====

COMPARATIVE STATEMENT OF INCOME

FOR THE PERIOD ENDING 05/31/16

	YEAR TO DATE	PRIOR YEAR TO DATE	\$ CHANGE	% CHANGE
REVENUE				
DOE Subcontracts	\$ 21,481,307.40	\$ 16,142,363.59	\$ 5,338,943.81	33.07%
NSF Subcontracts	6,743.13	25,156.88	(18,413.75)	-73.20%
State Revenue	2,018,700.45	6,445,047.99	(4,426,347.54)	-68.68%
Contributions & Donations	407,781.62	595,000.00	(187,218.38)	-31.47%
Checking Interest	143.23	75.60	67.63	89.46%
Interest Income	103,940.32	175,768.73	(71,828.41)	-40.87%
TOTAL REVENUE	24,018,616.15	23,383,412.79	635,203.36	2.72%
DIRECT COSTS				
Direct Labor	6,632,052.98	6,640,436.05	(8,383.07)	-0.13%
ERT Labor	30,458.79	34,316.94	(3,858.15)	-11.24%
Board of Directors	10,840.00	11,451.39	(611.39)	-5.34%
Capital Outlay >\$5K	135,340.65	31,289.00	104,051.65	332.55%
Contractual Svcs	6,599,878.32	4,218,379.97	2,381,498.35	56.46%
Emergency Resp	-	2,346.49	(2,346.49)	-100.00%
Inventory	265,545.34	336,779.91	(71,234.57)	-21.15%
Supplies	1,352,354.35	634,682.49	717,671.86	113.08%
Travel - Domestic	82,116.65	73,386.66	8,729.99	11.90%
Travel - Foreign	39,239.88	24,216.81	15,023.07	62.04%
Utilities	2,043,191.72	1,839,723.54	203,468.18	11.06%
Other Direct Costs	260,960.06	184,336.89	76,623.17	41.57%
Unallow/Unbill Costs	315,401.58	369,722.04	(54,320.46)	-14.69%
TOTAL DIRECT COSTS	17,767,380.32	14,401,068.18	3,366,312.14	23.38%
INDIRECT COSTS				
Fringe Benefits	3,460,084.20	3,092,182.59	367,901.61	11.90%
Overhead	4,033,965.69	3,472,786.36	561,179.33	16.16%
TOTAL INDIRECT COSTS	7,494,049.89	6,564,968.95	929,080.94	14.15%
GROSS PROFIT	(1,242,814.06)	2,417,375.66	(3,660,189.72)	-151.41%
OTHER INCOME				
Water Treatment	222,314.62	171,628.18	50,686.44	29.53%
Miscellaneous Income	65,025.72	83,152.70	(18,126.98)	-21.80%
Other Operating Income	3,256.65	965.00	2,291.65	237.48%
TOTAL OTHER INCOME	290,596.99	255,745.88	34,851.11	13.63%
OTHER EXPENSES				
Loss(Gain) on Sale of FA	155,509.06	2,382.14	153,126.92	6428.12%
Reclass Incr Net Assets	(1,449,965.71)	(1,297,440.86)	(152,524.85)	11.76%
TOTAL OTHER EXPENSES	(1,294,456.65)	(1,295,058.72)	602.07	-0.05%
NET INCOME/LOSS ()	\$ 342,239.58	\$ 3,968,180.26	\$ (3,625,940.68)	-91.38%

South Dakota Science & Technology Authority
Available Cash
5/31/2016

Cash Total Checking/Savings	\$ 491,619
Cash With State Treasurer	<u>\$ 13,621,072</u>
Total Cash	\$ 14,112,691
Less: Restricted Funds	
Indemnification/Mine Closure	\$ (8,879,921)
Experiments (Xenon, Interest, Infrastructure)	<u>\$ (2,357,275)</u>
Total Cash Available for Infrastructure Upgrades and Operations	\$ 2,875,495
Less: Total Liabilities w/out Xenon Notes Payable & Pension	<u>\$ (1,289,481)</u>
Available Cash	<u><u>\$ 1,586,014</u></u>

SDSTA Operating Budget Summary FY2016

Actual vs Budget

May 2016 & YTD

	\$ Over/Under				\$ Over/Under				
	May 2016	Budget	Budget	% of Budget	Actual YTD	YTD Budget	Budget	% of Budget	% Remaining
									100%
SDSTA (Authority) Direct Charges									
Board of Directors	\$18,240.00	\$19,850.00	\$1,610.00	91.89%	\$211,875.00	\$217,351.00	\$5,476.00	97.48%	2.52%
Executive Office	\$11,937.00	\$15,915.00	\$3,978.00	75.01%	\$163,620.00	\$181,555.00	\$17,935.00	90.12%	9.88%
Science Center E & O	\$4,116.00	\$4,500.00	\$384.00	91.47%	\$30,144.00	\$30,249.00	\$105.00	99.65%	0.35%
Science Liaison	-\$700.00	\$373.00	\$1,073.00	-187.67%	-\$508.00	\$4,103.00	\$4,611.00	0.00%	100.00%
Sanf.L.Visitor C. (Director)	\$6,423.00	\$6,550.00	\$127.00	98.06%	\$68,075.00	\$70,196.00	\$2,121.00	96.98%	3.02%
Subtotal	\$40,016.00	\$47,188.00	\$7,172.00	84.8%	\$473,206.00	\$503,454.00	\$30,248.00	93.99%	6.01%
Federal/State Funding - Direct Charges									
Fermi P.O.#618228 Staff Services	\$0.00	\$0.00	\$0.00	0.0%	\$298,415.00	\$230,062.00	-\$68,353.00	129.71%	-29.71%
Fermi P.O.#618741 Excav.Des.	\$0.00	\$0.00	\$0.00	0.0%	\$1,413,736.00	\$1,416,157.00	\$2,421.00	99.83%	0.17%
Fermi P.O.#620223 Building/Infra.	\$20,695.00	\$0.00	-\$20,695.00	100.0%	\$2,119,819.00	\$2,292,987.00	\$173,168.00	92.45%	7.55%
Fermi P.O.#622034 WasteRockSt.	\$0.00	\$0.00	\$0.00	0.0%	\$56,150.00	\$69,200.00	\$13,050.00	81.14%	18.86%
Fermi P.O.#623825 RiskWShop	\$0.00	\$0.00	\$0.00	0.0%	\$22,567.00	\$24,269.00	\$1,702.00	92.99%	7.01%
Fermi P.O.#624787 BlastStudy	\$0.00	\$0.00	\$0.00	0.0%	\$80,399.00	\$126,177.00	\$45,778.00	63.72%	36.28%
Fermi P.O.#624751 Director Review	\$0.00	\$0.00	\$0.00	0.0%	\$3,813.00	\$6,653.00	\$2,840.00	57.31%	42.69%
Fermi P.O.#625206 CD3Review	\$0.00	\$0.00	\$0.00	0.0%	\$5,022.00	\$7,650.00	\$2,628.00	65.65%	34.35%
Fermi P.O.#625500 F.SiteFacil.Servic	\$20,906.00	\$23,333.00	\$2,427.00	89.6%	\$111,547.00	\$112,922.00	\$1,375.00	98.78%	1.22%
Fermi P.O.#625501 Engin.Services	\$14,595.00	\$23,600.00	\$9,005.00	61.84%	\$90,734.00	\$96,158.00	\$5,424.00	94.36%	5.64%
Fermi P.O.#625691 B/Site Final Des.	\$116,968.00	\$200,000.00	\$83,032.00	58.48%	\$491,964.00	\$650,000.00	\$158,036.00	75.69%	24.31%
Fermi P.O.#625692 Pre Excav.F.D.	\$227,342.00	\$250,000.00	\$22,658.00	90.94%	\$655,404.00	\$750,000.00	\$94,596.00	87.39%	12.61%
Fermi P.O.#627228GlobalSurSupp.	\$115.00	\$2,104.00	\$1,989.00	5.47%	\$115.00	\$2,104.00	\$1,989.00	5.47%	94.53%
Fermi P.O.#627356GlobalSurvey	\$36,854.00	\$40,000.00	\$3,146.00	92.14%	\$36,854.00	\$40,000.00	\$3,146.00	92.14%	7.87%
LBNL LUX C#6973786	\$12,101.00	\$9,742.00	-\$2,359.00	124.22%	\$111,853.00	\$108,868.00	-\$2,985.00	102.74%	-2.74%
LBNL Operations C#6994297	\$1,326,445.00	\$1,359,225.00	\$32,780.00	97.59%	\$10,689,418.00	\$10,810,003.00	\$120,585.00	98.88%	1.12%
LBNL LUX/Zeplin C#7093667	\$0.00	\$0.00	\$0.00	0.0%	\$50,721.00	\$58,992.00	\$8,271.00	85.98%	14.02%
LBNL LUX/Zeplin C#7255146	\$20,464.00	\$20,751.00	\$287.00	98.62%	\$166,033.00	\$214,836.00	\$48,803.00	77.28%	22.72%
LBNL Ross Rehab C#7262800	\$263,203.00	\$432,002.00	\$168,799.00	60.93%	\$1,724,752.00	\$2,281,464.00	\$556,712.00	75.60%	24.40%
LBNL kISMET Task#7289931	\$4,487.00	\$20,460.00	\$15,973.00	21.93%	\$4,487.00	\$20,460.00	\$15,973.00	21.93%	78.07%
MJD (Majorana) # 5-4473	\$0.00	\$0.00	\$0.00	0.0%	\$9,130.00	\$12,000.00	\$2,870.00	76.08%	23.92%
MJD (Majorana) ORNL144149	\$2,328.00	\$2,000.00	-\$328.00	116.4%	\$13,957.00	\$12,000.00	-\$1,957.00	116.31%	-16.31%
Northwestern Univ. NASA981568	\$4,487.00	\$13,750.00	\$9,263.00	32.63%	\$4,487.00	\$13,750.00	\$9,263.00	32.63%	67.37%
CUBED - USD	\$0.00	\$0.00	\$0.00	0.0%	\$739.00	\$1,000.00	\$261.00	73.90%	26.10%
BHSU-UGCampus Gen.Serv.	\$0.00	\$0.00	\$0.00	0.0%	\$61.00	\$400.00	\$339.00	15.25%	84.75%
Sanf.Sci.Ed.Center - GOED Funded	\$47,390.00	\$35,000.00	-\$12,390.00	135.4%	\$392,894.00	\$362,085.00	-\$30,809.00	108.51%	-8.51%
U. of Minn. DUGL#A003778902	\$0.00	\$0.00	\$0.00	0.0%	\$908.00	\$2,000.00	\$1,092.00	45.40%	54.60%
SDSM&Tech CASPAR Gen.Serv.	\$0.00	\$0.00	\$0.00	0.0%	\$1,232.00	\$6,400.00	\$5,168.00	19.25%	80.75%
* Xilinx, Inc. P.O.#732495	\$203.00	\$240.00	\$37.00	84.58%	\$2,598.00	\$4,600.00	\$2,002.00	56.48%	43.52%
Subtotal	\$2,118,583.00	\$2,432,207.00	\$313,624.00	87.11%	\$18,559,809.00	\$19,733,197.00	\$1,173,388.00	94.05%	5.95%
Indirect Expenses									
Indirect Charges Personnel	\$117,295.00	\$117,918.00	\$623.00	99.47%	\$1,248,208.00	\$1,251,968.00	\$3,760.00	99.70%	0.30%
Indirect Charges Other	\$565,058.00	\$364,279.00	-\$200,779.00	155.12%	\$3,171,126.00	\$2,855,881.00	-\$315,245.00	111.04%	-11.04%
Subtotal	\$682,353.00	\$482,197.00	-\$200,156.00	141.51%	\$4,419,334.00	\$4,107,849.00	-\$311,485.00	107.58%	-7.58%
Totals	\$2,840,932.00	\$2,914,404.00	\$73,472.00	95.93%	\$23,452,349.00	\$24,344,500.00	\$892,151.00	96.34%	3.66%

* Private Corporation (Commercial Group)

SDSTA CAPEX Budget Summary FY15/16
Actual vs Budget
May 2016 & YTD

<u>Budget Area</u>	<u>Actual Month</u>	<u>FY2016 Monthly Budget</u>	<u>\$ Over/Under Budget</u>	<u>% of Budget</u>	<u>Actual YTD</u>	<u>FY2016 YTD Budget</u>	<u>\$ Over/Under Budget</u>	<u>% of Budget</u>	<u>% Remaining</u>
									100.00%
Operational CAPEX	\$ 50,435.10	\$ 57,591.00	\$ 7,155.90	87.57%	\$ 6,932,896.81	\$ 9,431,845.26	\$ 2,498,948.45	73.51%	26.49%
TOTAL CAPEX	\$ 50,435.10	\$ 57,591.00	\$ 7,155.90	87.57%	\$ 6,932,896.81	\$ 9,431,845.26	\$ 2,498,948.45	73.51%	26.49%

SD Science & Technology Authority
Operational CAPEX Budget
Monthly Actual vs Budget

Project #	Project Description	May-16	Budget	\$ Over/UnderBudget	% of Budget
CAP2012-27	Ross Shaft Furnishings Repl.M&S	\$ -	\$ -	\$ -	0.00%
CAP2012-28	Work Decks	\$ -	\$ -	\$ -	0.00%
CAP2012-32	SDSTA Personnel	\$ 2,399.40	\$ 2,591.00	\$ 191.60	92.61%
CAP2014-01	Sanford Visitor Center Design & Construction	\$ 2,965.59	\$ -	\$ (2,965.59)	100.00%
CAP2014-05	CASPAR Experiment Development	\$ -	\$ -	\$ -	0.00%
CAP2014-06	BHSU Jonas Science Building Renovation	\$ -	\$ -	\$ -	0.00%
CAP2014-09	CASPAR Facility Development	\$ -	\$ -	\$ -	0.00%
CAP2014-11	BHSU Facility Development	\$ -	\$ -	\$ -	0.00%
CAP2016-01	Sanford Visitor Center Exhibit Davis Tribute	\$ -	\$ -	\$ -	0.00%
CAP2016-02	LZ Surface & Facility Upgrades	\$ 2,333.70	\$ 5,000.00	\$ 2,666.30	46.67%
CAP2016-03	LZ Xenon Gas	\$ 416.17	\$ -	\$ (416.17)	100.00%
CAP2016-04	Water Inflow Project - Pipe Fusing	\$ 42,320.24	\$ 50,000.00	\$ 7,679.76	18.15%
	Monthly Totals	\$ 50,435.10	\$ 57,591.00	\$ 7,155.90	87.57%

SD Science & Technology Authority
Operational CAPEX Budget
YTD FY2016 Actual vs Budget

Project #	Project Description	May 2016 YTD	FY2016 Budget	\$ Over/UnderBudget	% of Budget	% Remaining
						100%
CAP2012-27	Ross Shaft Furnishings Repl.M&S	\$1,397,358.26	\$ 1,397,358.26	\$ -	100.00%	0.00%
CAP2012-28	Work Decks	\$34,139.47	\$ 34,577.00	\$ 437.53	98.73%	1.27%
CAP2012-32	SDSTA Personnel	\$1,227,627.49	\$ 1,230,628.00	\$ 3,000.51	99.76%	0.24%
CAP2014-01	Sanford Visitor Center Design & Construction	\$308,166.18	\$ 337,017.00	\$ 28,850.82	91.44%	8.56%
CAP2014-05	CASPAR Experiment Development	\$54,543.62	\$ 301,347.00	\$ 246,803.38	18.10%	81.90%
CAP2014-06	BHSU Jonas Science Building Renovation	\$892,817.20	\$ 1,116,209.00	\$ 223,391.80	79.99%	20.01%
CAP2014-09	CASPAR Facility Development	\$927,202.65	\$ 959,709.00	\$ 32,506.35	96.61%	3.39%
CAP2014-11	BHSU Facility Development	\$314,616.16	\$ 275,000.00	\$ (39,616.16)	114.41%	-14.41%
CAP2016-01	Sanford Visitor Center Exhibit Davis Tribute	\$71,351.59	\$ 80,000.00	\$ 8,648.41	89.19%	10.81%
CAP2016-02	LZ Surface Facility Upgrades	\$367,304.02	\$ 1,500,000.00	\$ 1,132,695.98	24.49%	75.51%
CAP2016-03	LZ Xenon Gas	\$1,279,098.30	\$ 2,000,000.00	\$ 720,901.70	63.95%	36.05%
CAP2016-04	Water Inflow Project - Pipe Fusing	\$58,671.87	\$ 200,000.00	\$ 141,328.13	29.34%	70.66%
Totals		\$6,932,896.81	\$ 9,431,845.26	\$ 2,498,948.45	73.51%	26.49%

Budgets reduced due to being funded
through LBNL subcontract.
Total Reduction - \$2,983,411.74

Source/WBS	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16
SDSTA	3.20	3.20	3.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Administration	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Communication	2.00	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DOE OPERATIONS	76.55	76.55	76.55	77.55	77.55	77.85	77.85	77.85	77.65	78.00	78.00	78.00
Administration	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
EHS	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00
Engineering	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15
Science	3.80	3.80	3.80	4.80	4.80	4.80	4.80	4.80	4.80	5.15	5.15	5.15
Operations												
Management	5.00	5.00	5.00	5.00	5.00	5.00	5.00	6.00	6.00	6.00	6.00	6.00
Ross Shaft	3.10	3.10	3.10	3.10	3.10	3.40	3.40	2.40	2.20	2.20	2.20	2.20
Yates Shaft	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Hoist Operations	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Hoist Maintenance	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.26	2.26	2.26	2.26
Ventilation	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.36	0.36	0.36	0.36
Hazard Mitigation	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Water Treatment	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20
Dewatering	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Electrical Power Distribution	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25
Cyberinfrastructure	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Buildings and Grounds	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.68	5.68	5.68	5.68
Equipment Maintenance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.30	1.30	1.30	1.30
Davis Campus	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	2.45	2.45	2.45	2.45
SDSTA CAPEX	29.25	29.25	29.25	0.35	0.35	0.35	0.35	0.35	0.35	0.00	0.00	0.00
ROSS SHAFT (DOE)				28.00	28.00	31.60	31.60	31.60	31.60	31.60	31.60	31.60
GEN 2 LZ	1.25	1.25	1.25	2.25	2.25	2.25	2.00	2.00	2.00	2.00	2.00	2.00
LBNF / DUNE	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40
LUX OPERATIONS	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
INDIRECT	14.10	14.10	14.10	16.10	16.10	16.10	17.10	17.10	17.10	17.10	17.10	17.10
Grand Total	126.85	126.85	126.85	127.95	127.95	131.85	132.60	132.60	132.40	132.40	132.40	132.40

**SDSTA Staffing Plan by Funding Source
May 2016**

Declaration of Surplus – Mr. Mike Headley

7B. Attached is the Declaration of Surplus—Printers (informational only).

Recommended Action:
Informational.

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DECLARATION OF SURPLUS PROPERTY

The South Dakota Science and Technology Authority (SDSTA) traded end-of-life copiers on the asset list for new leased multifunction copiers. Rather than purchasing new copy equipment, a lease option was negotiated with one of the vendors, A&B Business Solutions. The lease option is part of a Managed Services Agreement, and also provides savings on printer toner and cartridge supplies as well as copy equipment maintenance.

Three older copiers were retired. Two of the three copiers were at end-of-life and there was no loss to retire the equipment. The third copier had a short life left, therefore a loss of \$944.68 was taken.

I hereby declare the SDSTA copiers traded-in to be surplus property.

Dated at Lead, South Dakota this 18th day of May, 2016.

A handwritten signature in blue ink, appearing to read "Mike Headley".

Mike Headley
SDSTA Executive Director

Approve amended Risk Transfer Protocols – Mr. Mike Headley

7E. Approve amended Risk Transfer Protocols for Contractors and Project Sponsors—attached.
Motion requested.

Recommended Action:

7E. Motion to approved Amended Risk Transfer Protocol for Contractors and Project Sponsors as presented.

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**Risk Transfer Protocols
for Contractors and
Project Sponsors
(Revised June, 2016~~December, 2012~~)**

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Purpose

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Appendix [FG](#) – Risk Transfer Work Flow Diagram

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Risk Transfer Procedure for
Contractors and Project Sponsors Contracts

I. GENERAL

A. Purpose. These Protocols are intended to:

1. Establish a systematic risk management procedure for the South Dakota Science and Technology Authority (the “Authority”).
2. Establish a written risk management plan that includes, among other things: (a) general categories of Contractors and Project Sponsors organized by level of risk, (b) types of coverage and limits of liability to be required for each category, (c) criterion used to determine whether the Homestake Indemnified Parties must be named as additional insureds on commercial insurance policies required of Contractors and Project Sponsors and (d) criterion used to determine whether a retained risk plan, pool or other form of “self-insurance” is acceptable in combination with or in lieu of commercial insurance.
3. Ensure all Contractors and Project Sponsors and its or their Representatives provide insurance in compliance with the terms of the Property Donation Agreement (“PDA”), as amended between and among Homestake Mining Company of California, the State of South Dakota and the Authority.

B. Scope. These protocols are applicable to all Contractors and Project Sponsors and its or their Representatives.

C. Protocol Structure. The Authority’s risk transfer program consists of two components: contractual provisions and insurance requirements. The contractual provisions are described below in Section II. The insurance requirements are described below in Section III.

D. Definitions.

1. Except as otherwise provided in this document, the term “Contractor,” as used in these protocols, means any natural person or legal entity that contracts with the Authority or a Project Sponsor to perform any work in connection with, on, or about any of the Authority’s property and includes all direct or indirect subcontractors or consultants of such natural person or legal entity.
2. Other terms are defined throughout this document when first used. Defined terms used in this document but not defined herein are defined in the PDA, as amended.

E. The Risk Manager. The Authority shall at all times employ a qualified internal Risk Manager.

F. Responsibilities.

1. The Executive Director will ensure that all requirements of the PDA, as amended, are met. The Executive Director will ensure compliance by allocating resources and delegating responsibility concerning contract review to the Risk Manager.

2. The Risk Manager will be responsible for categorizing all Contractors and Project Sponsors and its or their Representatives by appropriate level of risk.
3. The Risk Manager is responsible for the development ~~of~~ a risk management program that includes decision making tools, standardized categorization parameters to be used to determine types of coverage, limits of liability and whether a retained risk plan, pool or other form of “self-insurance” is acceptable.
4. The Risk Manager ensures the proper contract language is applied and inserted within each contract on a case-by-case basis.
5. An independent risk management consultant (the “Risk Management Consultant”) retained by the Authority will upon request review the Risk Manager’s determinations concerning types and amounts of coverage required of “Increased Risk” Contractors and Project Sponsors and will periodically review the Risk Manager’s determinations concerning the level of risk assigned to particular Contractors and Project Sponsors. The Risk Management Consultant will be identified and retained by the Executive Director, in consultation with the Authority’s general counsel.
6. The Risk Manager shall have the separate and independent duty and ability to report directly to general counsel for the Authority.

G. Document Retention.

1. The Authority shall retain copies of all Contracts, Memoranda of Understanding or other Agreements with Contractors and Project Sponsors, insurance certificates and policies for a minimum of seven (7) years after final completion or final decommissioning.
2. Anything in this document to the contrary notwithstanding, the Authority shall at all times comply with the document retention provisions of PDA section 6.10 (c).

H. Inclusion in Contracts and Memoranda of Understanding. In all projects (whether conducted by the Authority or a Project Sponsor) involving competitive bids, the insurance and other requirements set out in this document will be provided to each interested Contractor prior to bid submission. Prior to final execution of a contract with a Contractor or a Memorandum of Understanding or other agreement with a Project Sponsor, the Risk Manager will verify the contract or memorandum contains the appropriate indemnification and insurance requirement language to ensure the requirements of this document have been met.

I. Changes to Protocols.

1. The Risk Manager makes minor changes for work flow and integration.
2. The Risk Manager delegates responsibilities for formatting, version numbers, document control and grammatical changes.
3. The Risk Manager notifies the Executive Director of the need for major conceptual changes.

4. Major changes require the review and approval of the Authority's general counsel and the Board of Directors, and must thereafter be submitted to Homestake.

II. CONTRACTUAL PROVISIONS

- A. Standard Clauses. The following standard clauses on Indemnification will be included in all contracts, Memoranda of Understanding or other agreements between the Authority and Contractors or Project Sponsors, between Project Sponsors and their Contractors and between subcontractors and consultants and their general contractors. The following standard clauses relating to the Acknowledgement of Risk and the Release and Agreement Not to Sue and Waiver will be included in all contracts, Memoranda of Understanding or other agreements between the Authority and Contractors or Project Sponsors, between Project Sponsors and their Contractors and between subcontractors and consultants and their general contractors when the Underground Property is entered or the work or activities directly relate to the Underground Property. ÷
 1. Indemnification. This provision requires the Contractor ~~or Project Sponsor~~ to assume liability for, and defend the Authority against, losses arising from the Contractor's ~~or project Sponsor's~~ negligence or intentional acts and the negligence or intentional acts of its ~~or their~~ Representatives. The Authority's standard indemnification clause is shown in Appendix A.
 2. Acknowledgment of Risk. Under this provision, Contractors and Project Sponsors are advised that all natural persons who enter the Underground Property are required to declare that they have investigated and been advised on the risks associated with going underground. The required form of Acknowledgment of Risk, as amended, is shown in Appendix B.
 3. Release, Agreement Not to Sue and Waiver (the "Release"). Under this provision, Contractors and Project Sponsors are advised that all natural persons who enter or conduct work or activities directly related to the Underground Property must agree to release, discharge and not sue the Homestake Indemnified Parties, the Authority, the State of South Dakota and their officers and employees from and against any and all actions, suits, damages, liability or other proceedings. The required form of Release, Agreement Not to Sue and Waiver, as amended, is shown in Appendix C.
- B. Natural Persons entering the Underground Property. Except for representatives of regulatory authorities with jurisdiction over the Underground Property, all natural persons entering the Underground Property for any reason or under any authority must execute the Acknowledgement of Risk and the Release, Agreement Not to Sue and Waiver prior to entering the Underground Property. Except for representatives of regulatory authorities as noted above, this requirement applies to all elected officials, officers, agents and employees of the Authority, the State of South Dakota, the United States and all other governmental entities.
- C. Waivers. Waivers of the requirement for execution of the standard indemnification clause may be waived by the Executive Director, in consultation with the Authority's legal counsel. Execution of the Acknowledgment of Risk and of the Release, Agreement Not to Sue and Waiver are required by the PDA and may only be waived by the Executive Director, in consultation with the Authority's legal counsel and with Homestake's written consent. The PDA requires Homestake's approval of the forms of the Acknowledgment of Risk and the

Release, Agreement Not to Sue and Waiver; accordingly, no changes may be made to those forms without Homestake's written consent.

III. INSURANCE REQUIREMENTS

- A. Overview. These guidelines establish four (4) broad categories of Contractors and Project Sponsors, based on the nature and extent of their activities on Authority property. The categories are "Negligible Risk," "Low Risk," "Intermediate Risk" and "Increased Risk." The following subsections set out ~~in~~ the criteria for classifying Contractors and Project Sponsors and the insurance requirements for each, as well as establishing criteria for requiring certain supplemental forms of coverage and determining when the Homestake Indemnified Parties must be included as additional insureds. The insurance requirements of this document apply not only to Contractors contracting with the Authority, but also Contractors contracting with Project Sponsors for work in, on or related to ² Authority property.
- B. Determination of Categories and Required Coverages. The Risk Manager shall in the first instance assign categories of risk and determine types and levels of coverage.
- C. Categories of Risk.
1. Category One ("Negligible Risk"). Contractors and Project Sponsors whose activities present a negligible risk of property damage and bodily injury. Examples of these types of activities include:
 - a. Onsite classroom training.
 - b. Mail or small parcel delivery (e.g., FedEx or UPS).
 - c. Lunch delivery.
 - d. Office equipment repair and maintenance.
 - e. Project Sponsor arrives to select location to collect a sample.
 2. Category Two ("Low Risk"). All Contractors and Project Sponsors not included in Categories One, Three or Four and that will be working on the surface only, except the following:
 - a. Any Contractor or Project Sponsor that at any one time will have ten (10) or more employees present on Authority property.
 - b. A Contractor or Project Sponsor using heavy construction equipment and with a total contract amount exceeding \$20,000.

Examples of "low risk" Contractors or Project Sponsors are as follows:

- a. Contractor working on water treatment plant modifications.
 - b. Project Sponsor that has graduate students assisting in biological surface surveys.
3. Category Three ("Intermediate Risk"). All Contractors and Project Sponsors doing work or with a presence on the Surface Property that are not included in categories One, Two or Four, in addition to all Contractors and Project Sponsors doing work in or with a

presence in the Underground Property that are not included in category Four. Examples of Contractor or Project Sponsor activities that may be appropriate for this category include the following:

- a. Structural work on the Surface Property.
 - b. Use of heavy equipment on the Surface Property.
 - c. Infrastructure work on the Surface Property.
 - d. Transportation on the Surface Property.
 - e. Presence of 10-19 Contractor employees onsite at any one time.
 - f. Work in buildings occupied by 20-49 persons or adjoining a building occupied by 20-49 persons.
 - g. Use of storage of suffocative or other hazardous materials on the Surface Property.
4. Category Four (“Increased Risk”). All Contractors and Project Sponsors doing work or with a presence on the Surface Property or in the Underground Property that are not included in categories One, Two or Three. Examples of Contractor or Project Sponsor activities that may be appropriate for this category include the following:
- a. Contractors or Project Sponsors conducting particularly hazardous activities, such as blasting or handling of hazardous materials.
 - b. Use of heavy equipment in the Underground Property.
 - c. Underground Property infrastructure work.
 - d. Underground Property transportation, including hoists and wenchers.
 - e. Work in buildings occupied by fifty or more people, or adjoining a building occupied by fifty or more people.
 - f. The presence onsite of twenty or more employees of the Contractor or its subcontractors and consultants.
 - g. Contracts or Projects with a value of \$5 million or more.
 - h. Installation or manipulation of high voltage infrastructure and related equipment.
 - i. Use of storage of suffocative or other hazardous materials in the Underground Property.

D. Standard Insurance Requirements.

1. Category One (“Negligible Risk”). No insurance is required unless special circumstances warrant otherwise.
2. Category Two (“Low Risk”).
 - a. Minimum Insurance. Prior to commencement of work, the Contractor or Project Sponsor will procure and maintain the following insurance:
 - i. Commercial general liability insurance with limits of liability of not less than \$1 million per occurrence. Such insurance shall name as additional insureds the Authority and its officers, agents, employees and representatives; The Regents of the University of California, its officers, agents, employees and representatives; Fermi National Accelerator Laboratory, LLC, its officers, agents, employees and representatives; and the United States of America.
 - ii. Business automobile liability insurance with limits not less than \$1 million per occurrence. Such insurance shall include coverage for owned, non-owned and hired automobiles.

- iii. Errors & omissions liability coverage with limits not less than \$1 million per claim (where applicable – see Section III.E below.)
- iv. Workers compensation insurance as required by South Dakota law.

b. Special Provisions Applicable to All Coverages:

- i. The insurer or the insurer's agent must make a reasonable effort to provide the Authority with ~~sixty~~ thirty (30) days' prior written notice of cancellation.
- ii. Self-insured retentions must be declared and approved by the Authority.

c. Evidence of Insurance: Prior to commencement of work, the Contractor or Project Sponsor shall furnish the Authority with certificates evidencing compliance with the insurance requirements above. The Contractor or Project Sponsor must agree to provide complete, certified copies of all required insurance policies if requested by the Authority.

d. Acceptability of Insurers. Insurance shall be placed with reputable insurers acceptable to the Authority.

3. Category Three ("Intermediate Risk").

a. Minimum Insurance. Prior to commencement of work, the Contractor or Project Sponsor will procure and maintain the following insurance:

- i. Commercial general liability insurance with limits of liability of not less than ~~\$2~~ \$1 million and not more than \$5 million per occurrence, as determined by the Risk Manager. Such insurance shall name as additional insureds Barrick Gold Corporation, Homestake Mining Company of California and the Affiliates of Barrick and Homestake and each of its and their Representatives; the State of South Dakota; the South Dakota Science and Technology Authority, its officers, agents, employees and representatives; The Regents of the University of California, its officers, agents, employees and representatives; Fermi National Accelerator Laboratory, LLC, its officers, agents, employees and representatives; and the United States of America. All additional insureds coverage must include current and completed operations.
- ii. Business automobile liability insurance with limits not less than \$1 million per occurrence. Such insurance shall include coverage for owned, non-owned and hired automobiles.
- iii. Errors & omissions liability coverage with limits not less than \$1 million per claim (where applicable – see Section III.E below.)
- iv. Workers compensation insurance as required by South Dakota law.

b. Special Provision Applicable to All Coverages. Self insured retentions must be declared and approved by the Authority.

c. Special Provisions Applicable to the Commercial General Liability Insurance. The commercial general liability policy shall:

- i. Provide contractual liability coverage at least as broad as Insurance Services Office ("ISO") form CG 00 01 12 07 or its equivalent.

- ii. Waive the insurer's right of subrogation against the Homestake Indemnified Parties.
 - iii. State that it is primary and non-contributory and shall apply without consideration for other policies carried by the Homestake Indemnified Parties.
 - d. Notice of Cancellation or Material Change in Coverage/Condition. The Contractor or Project Sponsor must use its best efforts to cause each insurer or the insurer's agent to make a reasonable effort to provide the Authority ~~sixty-thirty~~ (360) days' prior written notice of cancellation or material change in coverage or condition.
 - e. Evidence of Insurance. Prior to commencement of the work, the Contractor or Project Sponsor shall furnish the Authority with certificates evidencing compliance with the insurance requirements above. The Contractor agrees to provide complete, certified copies of all required insurance policies if requested by the Authority.
 - f. Acceptability of Insurers. Insurance shall be placed with reputable insurers acceptable to the Authority.
 - g. Waivers. The Risk Manager may modify or waive any of the requirements in subsections 3(a) through 3(f) above upon the terms and conditions of this subsection (g); provided, however that in no circumstance may the Risk Manager waive requirements set out above in subsection 3(a)(i). The Risk Manager may waive requirements under this subsection (g) after taking into account whether the activity will be underground or on the surface; the duration, nature and complexity of any activity taking place underground; and the Authority's potential exposure to loss resulting from the activity.
4. Category Four ("Increased Risk").
- a. Minimum Insurance. Prior to commencement of work, the Contractor or Project Sponsor will procure and maintain the following insurance:
 - i. Commercial general liability insurance with limits of liability of \$5 million or greater per occurrence, as determined by the Risk Manager after consideration of the nature and scope of the work or Project. Such insurance shall name as additional insureds Barrick Gold Corporation, Homestake Mining Company of California and the Affiliates of Barrick and Homestake and each of its and their Representatives; the State of South Dakota; the South Dakota Science and Technology Authority, its officers, agents, employees and representatives; The Regents of the University of California its officers, agents, employees and representatives; Fermi National Accelerator Laboratory, LLC, its officers, agents, employees and representatives and the United States of America. All additional insureds coverage must include current and completed operations.

- ii. Business automobile liability insurance with limits not less than \$1 million per occurrence. Such insurance shall include coverage for owned, non-owned and hired automobiles.
 - iii. Errors & omissions liability coverage with limits not less than \$1 million per claim given the nature and scope of work and determined by Risk Manager (where applicable – see Section III.E below.)
 - iv. Workers compensation insurance as required by South Dakota law.
- b. Special Provision Applicable to All Coverages. Self-insured retentions must be declared and approved by the Authority.
- c. Special Provisions Applicable to the Commercial General Liability Insurance. The commercial general liability policy shall:
 - i. Provide contractual liability coverage at least as broad as Insurance Services Office (“ISO”) form CG 00 01 12 07, or its equivalent.
 - ii. Waive the insurer’s right of subrogation against the Homestake Indemnified Parties.
 - iii. State that it is primary and non-contributory and shall apply without consideration for other policies carried by the Homestake Indemnified Parties.
 - iv. Include a provision that the insurer will not raise any coverage defense based on the statutory immunity of the State of South Dakota, the Authority or the Homestake Indemnified Parties.
- d. Notice of Cancellation or Material Change in Coverage/Condition. The Contractor or Project Sponsor must use its best efforts to cause each insurer or the insurer’s agent to make a reasonable effort to provide the Authority ~~sixty~~ sixty-three (360) days’ prior written notice of cancellation or material change in coverage or condition.
- e. Evidence of Insurance. Prior to commencement of the work, the Contractor or Project Sponsor shall furnish the Authority with certificates evidencing compliance with the insurance requirements above. The Contractor agrees to provide complete, certified copies of all required insurance policies if requested by the Authority.
- f. Acceptability of Insurers. Insurance shall be placed with reputable insurers acceptable to the Authority.

E. Subcontractors and consultants.

- 1. The categories of risk and insurance requirements for each shall apply not only to the general contractor, but also to all subcontractors, consultants and others doing work in

connection with a contract or Project under the direction or auspices of a Contractor or Project Sponsor. A category of risk and the applicable insurance requirements will be determined on a “per subcontractor” or “per consultant” basis, taking into account the particular work to be done by the subcontractor or consultant and the interrelationship of that work to other work being conducted by the Contractor or Project Sponsor.

2. By way of illustration but not limitation, a subcontractor providing lunch delivery services on the Surface Property to a general contractor doing work in the Underground Property would be categorized as “Negligible Risk” despite the fact that the general contractor’s work might be categorized as “Intermediate Risk” or “Increased Risk.” A consultant never entering the Underground Property but providing design work relating to hoists or ventilation in the Underground Property might be categorized as “Increased Risk.”

F. Supplemental Coverages.

1. Illustration 1 below describes when supplemental insurance coverages should be required in certain circumstances; in many cases more than one type of insurance may be required. To use Illustration 1, identify the activity(ies) to be performed by the Contractor or Project Sponsor in the first column of the table. Then note the insurance coverage necessary to protect against losses that may arise from that activity. Finally, proceed to Section III.E.2 below to determine how to modify the standard insurance requirements.

Coverage Requirement	Professional Liability	Pollution Liability	Builders Risk	Aircraft Liability	Cargo Insurance	Installation Floater, .
Contract Activity Involves:						
Construction or Remodeling Projects Construction or remodeling projects over \$50,000 (excluding contracts for grading and/or paving)			X			
Hazardous or Waste Materials Removal of asbestos or lead-based paint; or the use, application, transport, removal, cleanup or disposal of hazardous material in quantities of 100 gallons or more; or the disposal, treatment, transport or storage of waste.		X				
Installation of Equipment						X
Professional Contractor Services Services from an accountant, architect, attorney, claims administration firm, consultant, engineer, financial advisor, medical professional, or other person who maintains a professional license	X					
Supply-- FOB Destination Supplying of all goods and equipment where Contractor is responsible for the goods/equipment to the point of delivery (FOB destination)					X	
Use of Aircraft				X		

Illustration 1

2. Based upon Illustration 1 and taking into account all relevant circumstances, the following supplemental coverages will be required:

- a. Aircraft Liability Insurance. Add the following requirement: aircraft liability insurance with limits not less than \$5,000,000.00 per occurrence for airplanes with seven seats or less, and \$10,000,000.00 per occurrence for aircraft with eight seats or above.
 - b. Builders Risk Insurance. Add the following requirement: All Risk Builders Risk, Special Form insurance or its equivalent, at replacement cost for materials, supplies, equipment, machinery and fixtures that are, or will become, part of Authority-owned property. Such insurance shall:
 - 1) Remain in effect until completion of the project and acceptance by the Authority.
 - 2) Include coverage for earthquake, flood, ordinance or law, temporary offsite storage, debris removal, pollutant cleanup and removal, preservation of property, excavation costs, landscaping, shrubs and plants and full collapse coverage during construction.
 - c. Cargo Insurance. Add the following requirement: Cargo insurance covering the value of the goods or equipment to be delivered until the goods or equipment is accepted by the owner.
 - d. Installation Floater. Add the following requirement: Installation floater covering the value of the equipment to be installed. Such insurance shall include:
 - 1) The owner as insured.
 - 2) Coverage for testing, water damage, mechanical breakdown and electrical injury.
 - e. Pollution Liability Insurance. Add the following requirement: Pollution Liability insurance for bodily injury, property damage, cleanup and defense costs with limits not less than \$1,000,000 per claim/\$1,000,000 annual aggregate and greater, depending on the extent of the risk given the potential severity and likelihood of pollution liabilities. The policy shall be endorsed to include the Authority, its officers, employees and representatives as insureds.
 - f. Professional Liability Insurance. Add the following requirement: Professional Liability insurance with limits not less than \$1,000,000 per claim/\$1,000,000 annual aggregate or greater, depending on the extent of the risk given the nature and scope of work.
- G. Inclusion of the Homestake Indemnified Parties as Additional Insureds. The Homestake Indemnified Parties shall be named as additional insureds on all insurance policies required by Contractors and Project Sponsors assigned to risk Categories Three and Four.

H. Contracts with Certain Funding Agencies.

The insurance requirements for contracts, including grant agreements, entered into with the United States government and its contractors and subcontracts to provide funding for the general operations and maintenance of Authority facilities and extraordinary projects shall be negotiated by the Executive Director, in consultation with the Chairperson of the Board, the Authority's legal counsel, and the Risk Management Consultant, taking into account the insurance requirement provisions of these Protocols, the risk to the Authority and the State of South Dakota, and the overall best interests of the overall mission of the Authority.

IV. RISK TRANSFER IN LIEU OF OR IN CONJUNCTION WITH COMMERCIAL INSURANCE.

- A. Overview. There may be instances where Contractors or Project Sponsors cannot or will not provide commercial insurance with the coverages and limits of coverage described above. The following sections describe when the Authority will waive insurance requirements or accept “self-insurance.”
- B. Waiver in lieu of other risk transfer mechanisms.
 - 1. There may be situations where it is necessary or appropriate to waive certain insurance requirements. These include situations where:
 - a. There is negligible risk of loss from a particular activity. For example, where the Contractor will not be operating a vehicle in performance of the work, the business automobile insurance requirement may be waived.
 - b. Requiring insurance is inconsistent with industry practice. For example, information technology service providers (such as software vendors) are generally unwilling to agree to standard insurance requirements. In these situations, the Authority will do its best to negotiate the most favorable terms possible to adequately protect the Authority.
 - c. The Contractor provides a highly specialized service such that:
 - 1) The Contractor has substantial leverage in the negotiation process, and
 - 2) The Authority has no reasonable alternative markets for the services required.
 - 2. In these circumstances, the Authority will negotiate the most favorable terms possible and will seek alternative means of transferring and mitigating risk, such as bonding, letters of credit, cash deposits, additional training, additional supervision by Authority, personnel and/or qualified Authority personnel to accompany Project Sponsors or their representative at all times.
 - a. ~~Project Sponsors that do not have a full-time presence at the facility and only visit for a short time to install equipment and/or calibrate equipment quarterly, semi-annually or annually.~~

- ~~b. Project Sponsors that have samples collected by the Authority for research purposes, their presence at the facility may include a one time trip, to quarterly, semi-annually or annually.~~
- ~~c. Contractor supplies a specific test or unique service, such as removing bats from the mine in an environmentally friendly and humane manner.~~

- C. Acceptance of extraordinary retentions or “self-insurance.” In some circumstances, the Authority will accept extraordinary retention or “self-insurance” in lieu of traditional commercial insurance. For the purposes of these protocols, the term “extraordinary retention” means retention or deductibles of \$100,000 or more. When evaluating proposals to transfer risk in that fashion, the Risk Manager, in consultation with the Risk Management Consultant, shall consider the following factors:
 - 1. The ability of the retained risk pool or “self-insurance” to provide scope and amounts of coverage reasonably equivalent to those available with a commercial insurance product.
 - 2. Evidence that the alternative arrangement has sufficient financial security to pay claims as presented.
 - 3. Evidence that the alternative arrangement has an adequate claims management system in place to provide proper handling of claims should they arise.
- D. Insurance or self-insurance purchased or provided by Project Sponsor collaborations. In many instances, there will not be a single Project Sponsor. Rather, a Project may be sponsored by a collaboration of various public and/or private laboratories or institutions of higher learning. In those circumstances, it is the responsibility of the collaboration to provide commercial insurance or some combination of “self-insurance” sufficient to satisfy the requirements imposed by the Risk Manager. Any such risk transfer mechanism must be reasonably acceptable to the Risk Manager, the Risk Management Consultant and the Authority’s general counsel.

V. EVIDENCE OF CONTRACTOR OR PROJECT SPONSOR COMPLIANCE

- A. Certificates of Insurance. Each Contractor and Project Sponsor is required to provide the Authority evidence of compliance with the Authority’s insurance requirements prior to commencement of work, unless the requirements are waived. The evidence of compliance will consist of a certificate of insurance issued by the Contractor’s insurer or broker or a similar document issued by a risk pool or “self-insurance” fund.
- B. Review. The insurance evidenced on the certificate will be compared to the contract requirements by the Risk Manager. To assist Authority personnel reviewing the certificates of insurance, the completed contract review checklist may be used in lieu of the actual contract. The Risk Manager will review the Contractor’s certificate of insurance to verify:
 - 1. The Contractor or Project Sponsor maintains the type of coverage and limits required in the contract or memorandum of understanding.

2. The Contractor's or Project Sponsor's insurers maintain acceptable financial ratings. This will be determined by confirming the insurer financial rating on www.ambest.com. All insurers with a financial rating below A-, VII or without an A.M. Best rating, will be subject to further evaluation by the Risk Management Consultant.
 3. The Contractor's policies are current.
 4. The appropriate "additional insured" language is included with respect to the Contractor's general liability policy (and pollution liability policy where applicable).
 5. The appropriate cancellation notice language is included.
 6. Other insurance requirement provisions are compiled with and the certificate otherwise contains complete and accurate information.
- C. Samples. Sample certificates of insurance are provided in the following appendices:
1. Appendix D – Evidence of insurance required by contracts using Category 2.
 2. Appendix E – Evidence of insurance required by contracts using Category 3.
 3. Appendix F – Evidence of insurance required by contracts using Category 4.
 4. Appendix I – Certificate of Insurance Review Checklist. The Authority may use the checklist to assist in and document the review of each certificate of insurance. The checklist items are ordered as they would ordinarily appear on a typical certificate of insurance.
- D. Examples of Unsatisfactory Evidence of Compliance. When reviewing certificates of insurance, there may be omissions, inaccuracies or other instances where the certificate does not appear to provide reliable evidence of compliance with Authority requirements. Common examples of those deficiencies and how the Authority responds to them are:
1. The Contractor or Project Sponsor is not the insured. This may be an error on the part of the issuer. For example, it is possible the parent company of the Contractor is named. If so, the Authority asks for a certificate that identifies both the parent and its subsidiary as the insured.
 2. The insurer is not rated by A.M. Best or maintains an A.M. Best rating below A-, VII.
 3. The actual name(s) of the insurer(s) may differ from what is on the certificate. The name can be re-confirmed with the agent/broker. If the certificate does not accurately reflect the name(s) of the insurer(s), the Risk Manager shall be notified and the certificates rejected.
 4. Contractor or Project Sponsor policies have effective dates later than the contract or memorandum of understanding effective date. The Contractor must provide a

certificate evidencing coverage effective prior to or coincidental with the contract's effective date.

5. Contractor or Project Sponsor policies expire prior to contract expiration. The Authority will schedule follow-up contact with the Contractor, Project Sponsor or its or their broker at the time the certificate is reviewed. The date scheduled for follow-up will be no less than two (2) weeks prior to expiration of the policy(ies). The Authority will request an updated certificate be issued evidencing a policy with coverage period of an additional twelve (12) months. The failure to maintain continuous coverage will result in a stop work order from the Authority.
6. Coverages do not match Authority requirements. The Contractor or Project Sponsor must supply a certificate evidencing the coverage required. Some Contractors or Project Sponsors may have more than one insurance provider. If the certificate being reviewed does not evidence all coverage, it is possible that the Contractor or Project Sponsor needs to request the other agent(s)/broker(s) /insurer(s) issue a certificate evidencing the missing insurance.
7. Policy limits do not match Authority requirements. Be sure excess liability limits are considered. These limits are listed separately on the certificate, not included in the commercial general liability policy limits. If necessary, the Contractor or Project Sponsor must apply a revised certificate evidencing the required limits.
8. The certificate does not specify the appropriate parties as additional insureds. The certificate may fail to identify one or all of the appropriate parties as additional insured. This omission may be ignored if there is an additional insured endorsement attached to the certificate with the appropriate parties identified as additional insureds. If no such endorsement is attached, the certificate must be revised to include the proper additional insured language. If the Contractor or Project Sponsor or its agent/broker is unwilling to include this language, notify the Risk Manager and reject the certificates.
9. The certificate discloses a self-insured retention and/or deductible of \$50,000.00 or greater. The Authority is relying on the certificate issuer to report self-insured retentions on the certificate. Retentions and/or deductibles of \$50,000.00 or greater are subject to the approval of the Risk Management Consultant.
10. Cancellation notice is less than the ~~60~~30 days required or is unspecified. A new certificate indicating the proper notice of cancellation of provision will be requested.
11. The certificate is not signed. An unsigned certificate is unacceptable. The Contractor or Project Sponsor must provide a signed certificate prior to commencement of work.

Contracts—Mr. Mike Headley

- 8A. USD Foundation loan agreement for additional xenon purchase—Mr. Ron Wheeler. Motion requested.
- 8B. Ellison Hill Option—Mr. Tim Engel. Motion requested.
- 8C. SDSTA summary of externally funded projects—attached. Informational only.

Recommended Action:

- 8A. Motion to approve the loan from the University of South Dakota Foundation, authorize the Chair in consultation with Legal Counsel to sign the loan agreement and promissory note, and to authorize the Executive Director to procure up to 500,000 liters of xenon once the loan documents are executed.*
- 8B. Motion to authorize the Chair, in consultation with the Executive Director and Legal Counsel, to exercise the option for the purchase of the Ellison Hill property at such time and upon such terms as the Chair deems appropriate*

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Externally Funded Projects—Mr. Mike Headley

8C. SDSTA summary of externally funded projects—attached. Informational only.

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SDSTA Summary of Externally Funded Projects (informational only)

Project	Authorized to date	Allocated to date	End date	Status after end date
Lawrence Berkeley National Lab (LBL)				
Sub 6994297 - SURF Operations	\$65,440,320	\$62,296,539	09/30/16	<i>New 5-yr contract through Fermilab</i>
Sub 6973786 - LUX	\$1,165,058	\$1,101,711	12/31/16	<i>Transitioning from LUX to LZ</i>
Sub 7255146 - LZ	\$500,000	\$500,000	09/30/18	<i>Expecting new contract</i>
Sub 7262800 - Ross Shaft Refurbishment	\$6,538,046	\$4,500,000	12/31/16	<i>Transfers to Fermilab (+~\$4M through completion)</i>
TO 7289931 - kISMET	\$75,498	\$75,498	09/30/17	<i>N/A</i>
Fermi Research Alliance (Fermilab)				
Sub 610750 Excavation & Geotech	\$9,850,000	\$6,921,160	02/28/18	<i>Design ends, Fermilab begins construction</i>
Sub 607915 Professional Staff Svcs	\$14,732,000	\$2,496,288	09/30/17	<i>Exercise of two 5-yr options, to 2027</i>
Sub 618141 Building/Infrastructure	\$18,200,000	\$6,088,434	12/31/19	<i>Design ends, Fermilab begins construction</i>
University of Minnesota				
DUGL	\$101,196	\$101,196	08/31/16	<i>N/A</i>
Oak Ridge National Laboratory (ORNL)				
Majorana	\$30,000	\$25,000	11/21/16	<i>Continued minimal maintenance</i>
Rock Melt (RESPEC)				
Subcontract 02703A		\$137,293	07/27/17	<i>N/A</i>
CASPAR (SDSMT)	TBD	TBD	TBD	<i>Expecting contract from SDSMT</i>
Northwestern University				
NASA NAI Biology	\$27,500	\$27,500	06/30/16	<i>N/A</i>

**South Dakota Science and Technology Authority
June 16, 2016 Board Meeting**

Agenda Item: 09

Executive Session – Chairperson Casey Peterson

See motion below.

Recommended Action:

Motion to enter into executive session to discuss personnel matters and to consult with legal counsel concerning contractual and legal matters.

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**South Dakota Science and Technology Authority
June 16, 2016 Board Meeting**

Agenda Item: 10

Report from Executive Session – Chairperson Casey Peterson

See motion below.

Recommended Action:

Motion to accept report from Executive Session.

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SDSTA Policies and Procedures—Mr. Mike Headley / Mr. Tim Engel

- 11A. Annual review of SDSTA Policies and Procedures—no action required.
- 11B. Board members to sign annual statements affirming compliance with Financial Conflict of Interest Policy 3:27—return to Mandy Knight.
- 11C. Briefing of new Conflict of Interest Law—Tim Engel.

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Annual Report of FRA/SDSTA Conflict of Interest Mitigation Plan—Mr. Tim Engel

Attached is the annual report required by the Fermi Research Alliance/SDSTA Conflict of Interest Mitigation Plan (also attached).

Recommended Action:
Informational.

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SOUTH DAKOTA SCIENCE AND
TECHNOLOGY AUTHORITY

CONFLICT OF INTEREST MITIGATION PLAN
REPORT TO THE BOARD OF DIRECTORS
JUNE 16, 2016

This report is submitted to the Office of General Counsel of Fermi Research Alliance, LLC ("FRA"), and to the South Dakota Science and Technology Authority ("SDSTA") Board of Directors pursuant to section IV of the Conflict of Interest Mitigation Plan (the "Plan") approved by the SDSTA Board of Directors on September 17, 2015.

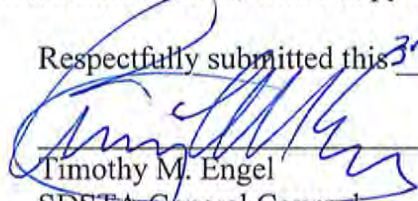
As required by subsection II.A of the Plan, on December 9, 2015, I provided training to key SDSTA staff concerning the potential for conflicts, reporting of conflicts and methods for mitigating those conflicts.

As required by section V of the Plan, on December 10, 2015, the SDSTA Board of Directors updated its whistleblower policy to provide protections for those making good faith conflict of interest reports.

Executive Director Headley sent an email report of a conflict of interest and proposed plan of mitigation on November 6, 2015, which report and plan were approved by FRA general counsel and me. FRA personnel have in some instances preempted conflicts of interest by excluding Executive Director Headley from discussions and contract negotiations. To the best of the undersigned's knowledge, information and belief, Executive Director Headley has of his own volition recused himself from involvement in any other matter that would otherwise require a report and plan for mitigation under the Plan.

Based upon our experience to date, it is recommended that the existing Conflict of Interest Mitigation Plan be revised to do away with the requirement that Executive Director Headley report each individual voluntary recusal, and to replace it with a requirement that he provide a written report of recusals as a part of the monthly written report to the SDSTA board of directors. SDSTA will provide a copy of the monthly written report of recusals directly to the Office of General Counsel of Fermi Research Alliance, LLC, with a copy to the undersigned.

Respectfully submitted this 3rd day of June, 2016.



Timothy M. Engel
SDSTA General Counsel

Report on Nominating Committee – Mr. Dana Dykhouse

Nominating Committee Report

May 20, 2016

Participants:

Mr. Dana Dykhouse, SDSTA Board of Director and Nominating Committee Chair

Dr. Ani Aprahamian, SDSTA Board of Director and Nominating Committee Member

Mr. Dykhouse and Dr. Aprahamian communicated as the nominating committee on May 20, 2016 for the purpose of nominating the slate officers for the 2016-2017 board year. The slate of officers is as follows:

Chairperson: Mr. Casey Peterson

Vice-Chairperson: Mr. Dana Dykhouse

Vice-Chairperson: Mr. Ron Wheeler

Secretary Treasurer: Ms. Patricia Lebrun

The nominating committee had contacted all of the candidates and they are each willing to serve in this capacity for another year.

Recommended Action:

Informational.

Election of Officers—Chairperson Casey Peterson

South Dakota Science and Technology Authority
Election Procedures Policy
Adopted 6/24/08

The Board of Directors shall follow the following procedure for the nomination and election of officers.

- A. The nomination and election process shall be held in open session.
- B. At the last meeting of the Board before the Annual Meeting, the Chairperson shall appoint a Nominating Committee.
- C. The following procedure shall be utilized at the Annual Meeting:
 - 1. The Chairperson shall call for the report of the Nominating Committee.
 - 2. After the Nominating Committee reports, the Chairperson shall ask if any Board member intends to make additional nominations.
 - 3. If no Board member indicates the intention to make additional nominations, the Chairperson shall call for a motion to elect the slate recommended by the Nominating Committee.
 - 4. If any Board member indicates the intention to make an additional nomination for any office, the slate recommended by the Nominating Committee shall be deemed rejected and the following procedure shall be utilized:
 - a. The Chairperson shall call for oral nominations for the office of Chairperson. Once it appears that all nominations have been made, a motion that nominations cease would be in order. This motion may be made with or without a call for such motion by the Chairperson.
 - b. If there is only one nominee, a motion that all nominations cease and that the nominee be elected Chairperson would be in order. This motion may be made with or without a call for such motion by the Chairperson.
 - c. If there is more than one nominee, nominations shall continue until there is a successful motion that nominations cease.
 - d. Upon passage of a motion that nominations cease, the Chairperson shall call for a vote. Each Board member shall announce his or her vote out loud. Counsel for the Authority shall tabulate the vote and announce the results.
 - e. The successful candidate shall immediately take office as Chairperson and conduct the remainder of the election and the meeting.
 - f. The Chairperson shall follow the procedure set forth above for each of the remaining offices.
- D. Pursuant to SDCL 1-16H-11, the affirmative vote of no less than four Board members is necessary to elect any officer. If no candidate receives four votes, the Board will vote twice more. If no candidate receives four votes after three attempts, the election for that office will be deemed adjourned until the next meeting of the Board. At the next meeting, the Board shall commence the election procedure set forth above in Section C.4, but only as to any office not filled at the prior meeting. This procedure shall continue from meeting-to-meeting until a candidate receives at least four votes. Pursuant to Article III, Section 1 of the Bylaws, the officers in office as of the commencement of the Annual Meeting shall remain in office until their successors are duly elected.

This policy shall remain in effect until specifically rescinded or modified.

Recommended Action:

Motion to accept the report from the nominating committee and to elect the slate of officers as discussed.

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South Dakota Science and Technology Authority
June 16, 2016 Board Meeting

Agenda Item: 15

Confirm date and time of next meeting—Chairperson Casey Peterson

The next board meeting will be held on Thursday, September 22, 2016 beginning at 9:00 AM (Mountain Time).

2016 Board Schedule	
March 17, 2016	09:00 am (MT)
June 16, 2016	08:00 am (MT)
September 22, 2016	09:00 am (MT)
December 15, 2016	09:00 am (MT)

SDSTA/Sanford Underground Research Facility
630 E. Summit Street, Lead SD 57754
Administration Building, 2nd Floor Vault
Please contact Mandy Knight for further questions.
Direct Line: 605.722.4022
Cell: 605.641.0475

Recommended Action:

None

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South Dakota Science and Technology Authority
June 16, 2016 Board Meeting

Agenda Item: 16

Board Comments—Chairperson Casey Peterson

Recommended Action:

None

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